



ANNUAL REPORT 2021

THE FUTURE OF HEALTHCARE

SAGLIĞIN GELECEĐİ

CONTENTS

1- Introduction	4
2- Our Collaborations	6
3- Liv Hospital in Numbers	8
4- Quality And Patient Satisfaction	12
5- Medical Departments	15
-Oral and Dental Health	16
-Algology Clinic	18
-Anesthesiology	20
-Brain and Nerve Surgery	24
-Biochemistry Laboratory	26
-Check-up and Wellness Clinic	28
-Pediatric Clinic	30
-Pediatric Surgery and Urology	36
-Dermatology	38
-Infectious Diseases and Clinic Microbiology	40
-Endocrinology and Metabolic Diseases	42
-Physical Therapy and Rehabilitation	44
-Gastroenterology, Hepatology and Nutrition	46
-General Surgery	50
-General Intensive Care	52
-Chest Diseases	54
-Ophthalmology	56
-Gynecology and Obstetrics Clinic	58
-Cardiovascular Surgery	60
-Cardiology Clinic	62
-Otorhinolaryngologic Diseases	64
-Chest Surgery	66
-Hematology	67
-Internal Medicine	68

-LivMedCell Regenerative Medicine Stem Cell Production Center	70
-Medical Oncology	72
-Nephrology And Hypertension Clinic	74
-Neurology	76
-Nuclear Medicine	78
-Radiation Oncology	79
-Obesity and Metabolic Surgery	80
-Orthopedics and Traumatology Clinic	82
-Rheumatology	84
-Organ Transplantation	85
-Plastic, Reconstructive and Aesthetic Surgery	86
-Psychiatry Clinic	87
-Radiology	88
-Urology	90
-Liv Hospital Home Care	92
6- Scientific Events	93
7- Patient Care Services	104
8- Corporate Events	110
9- Health Schools	120
10- Scientific Publications	124
-Multidisciplinary Doctor Meetings	136
-Istinye University	137
11- Social Responsibility Projects	138
12- International Guest Services	140

Liv Hospital

Annual Report 2021

1

INTRODUCTION

INTRODUCTION



Nature of the water tells a philosophy:
Each drop of water is different from each other. Their weights, shapes, speeds...
But when they become "one", when they become "whole", when they become "a family", they become the same.
Like a stream getting stronger as it flows...
Like a waterfall taking its courage from the mountain...
Like a drop of water giving life to a sprout in soil...
It accumulates, becomes stronger, becomes courageous.
The power of the water that succeeds in piercing the rock comes from the continuity of the drops.
Water is universal. It becomes one with every shape and every situation. It unites every color, like the rainbow it creates.
It gives life to the earth.

Each member of the Liv Hospital Family is like a drop of water. They get stronger when together. Their courage and confidence comes from being a family.

In the year 2021, when the pandemic processes that challenged us all were very intense, we accumulated drop by drop like water, and formed oceans. Our journey that started in 2013 continued by expanding even more, we opened Vadistanbul, which is our third branch in Istanbul and sixth in Turkey.

- We made a collaboration with Boston Children's Hospital, one of the most important children's hospitals in the world for scientific and public conferences,
- 54 different treatment programs for children has been accomplished with a multidisciplinary approach rarely diseases,
- Contemporary approaches in brain tumor, holistic treatment with pituitary center has been established,
- Hypertrophic Cardiomyopathy Follow-up, Treatment and Coronary Anomaly Surgery Programs in Advanced Heart Health Center for patients from newborns to adults
- High technology and modern medicine applications in all fields of urology, especially urological cancers in the Advanced Prostate Clinic has been established for men's health.
- Physical therapy and rehabilitation clinic carrying out innovative adults has been settled.
- All robotic surgery applications including kidney transplantation,
- We have implemented disease based solutions with a holistic approach in diagnosis and treatment processes in the Advanced Endoscopy Center.

In 2021, we got stronger together, like drops of water...
We hope that this continues in 2022...

Liv Medical Executive Committee Ulus/Vadistanbul

OUR COLLABORATIONS

ICMAS – International Contemporary
Medical Academy of Science

Liv Hospital and Istinye University have signed an important international online education project. Thanks to the cooperation with the International Contemporary Medical Academy of Science ICMAS, many physicians from around the world are hosted by providing training services in different fields of medicine. In the academy, where experience and training meetings are held for physicians and medical students from many different countries, current approaches, new practices, latest treatment methods and technologies are shared according to their specialties. On the platform, which brings together both medical school students and doctors, trainings are held online. At the academy, doctors are able to visit different countries and hospitals for observation and residency training when they desire.

BOSTON CHILDREN'S HOSPITAL &
LIV HOSPITAL ULUS SECOND OPINION SERVICE

Liv Hospital Ulus and Boston Children's Hospital have signed a cooperation for the health and future of children. Boston Children's Hospital, considered as the best hospital of USA in ranking of children's hospitals, provides second opinion services for diagnosis and treatment of children with specific and difficult to diagnose diseases. It is planned to receive opinions from doctors of Boston Children's Hospital, who are experts in their fields, via online consultation for the diagnosis and treatment of complex diseases that are difficult to diagnose.



SPINE SURGERY CENTER (Liv Spine Center) CERTIFICATION

Liv Hospital Ulus Spine Surgery was chosen for the first foreign fellow program of Aospine Spine Surgery Center found in many European countries such as France and Germany. AOSpine Europe in Switzerland, carrying out works for advanced training of spinal surgery and its specialists in the world, conducts studies for the training of spine surgeons in different countries. The institution selects some centers which have competencies in spinal surgery, as training center for spinal surgery. AOSpine, which is an association widely and quite accepted all over the world, conducts its selections in a neutral and meticulous manner. In the selection of a center, number of cases, diversity of the cases, possibilities of multidisciplinary approach and scientific publications of the center are taken into consideration.

FIRST BRACHYTHERAPY TRAINING CENTER IN
INTERNATIONAL PLATFORM

Liv Hospital Ulus has been elected Turkey's first and only Brachytherapy Training Center by the international non-profit organization BrachyAcademy. Brachytherapy is used especially in treatment of skin, prostate and gynecological cancers.

USA BREAST CANCER CONSORTIUM MEMBERSHIP
CERTIFICATE – National Consortium of Breast Centers

Certification was done in order to implement and expand the programs of National Consortium of Breast Centers in USA, and to work in cooperation by meeting international standards.

3

Liv Hospital

Annual Report 2021

LIV HOSPITAL IN NUMBERS

LIV HOSPITAL IN NUMBERS

2013-2020

ULUS

Outpatient

1.387.742

Inpatient

126.991

Operation

60.559

Foreign Patient

114.578

2021

ULUS - VADİSTANBUL

Outpatient

254.383

Inpatient

21.005

Operation

12.480

International

14.444

Liv Hospital 2021

Liv Hospital on the International Platform

Our team, speaking **23** different languages, provided services to patients from **142** countries.



QUALITY AND PATIENT SATISFACTION

Quality Management System and Patient Safety Training was given to approximately 1000 of our employees in 2021



DOCUMENT MANAGEMENT

In 2021, 1242 new documents were prepared, 395 documents were revised.



SELF-INSPECTION

In 2021, 45 departments were audited by the quality unit within the scope of international standards in order to develop and improve processes.

INDICATOR TRACKING

The 200 indicators that are included in international standards and which the departments transmit monthly were followed up.

4

Liv Hospital

Annual Report 2021

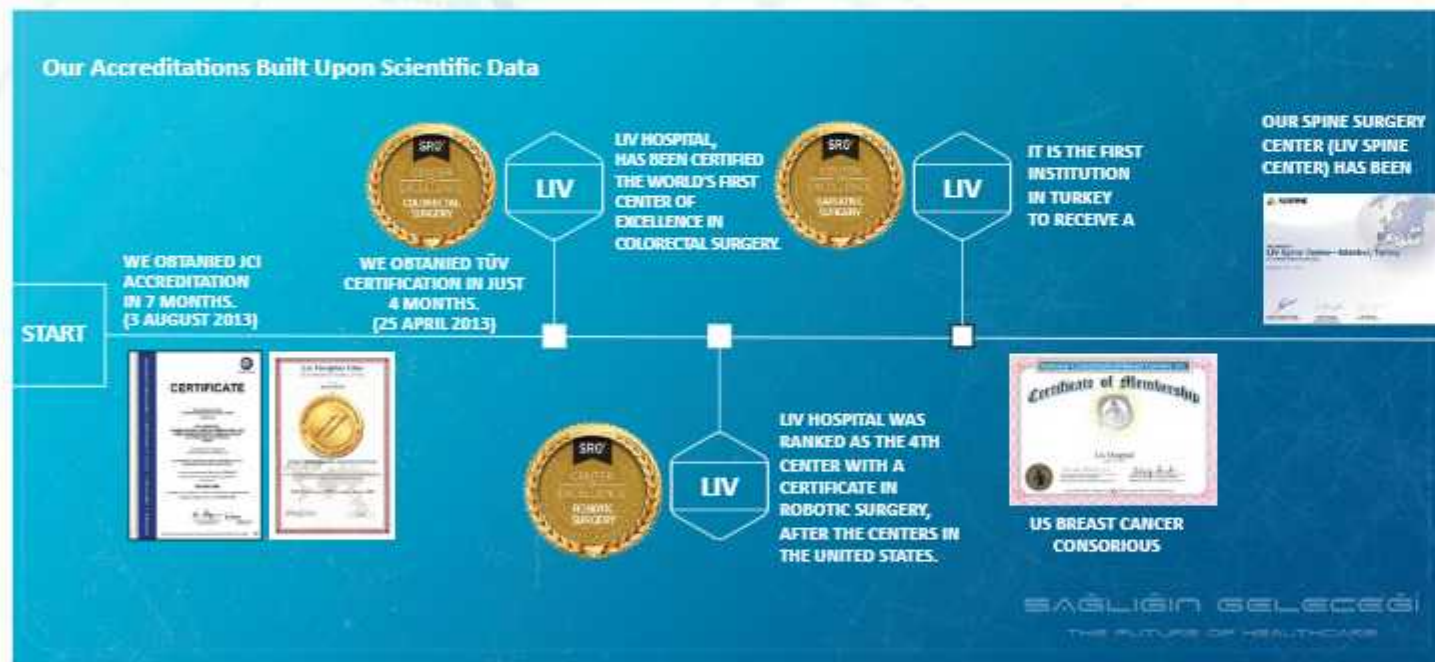
**QUALITY AND
PATIENT
SATISFACTION**

QUALITY AND PATIENT SATISFACTION

SOME OF THE DATA TRACKED

Ratio of Patients Marked for Safe Surgical Procedure (%)	100%
The Safe Surgical Checklist Utilization Rate (%)	100%
Time to Reach Blue Code min.	2 min.
Number of Authentication Errors	0
Complete Patient File Ratio (%)	100%
Compliance Rate of Medical Devices with Maintenance and Calibration (%)	100%
The Realization Rate Of Planned Trainings (%)	100%
Completion rate of health screening for employees (%)	100%

OUR SCIENTIFIC DATA BASED PROMOTIONS/ACCREDITATIONS



5

Liv Hospital

Annual Report 2021

**MEDICAL
DEPARTMENTS**

MEDICAL DEPARTMENTS

ORAL AND DENTAL HEALTH CLINIC ULUS - VADISTANBUL

In Liv Hospital Oral and Dental Health Clinic, specialised treatments are carried out with dentists from all branches in Ulus and Vadistanbul. Complicated treatments are carried out under a multidisciplinary approach with a team, who have different branches of specialties.

Treatments Applied

Conventional Dentistry 36 %
Digital Dentistry 24 %
Aesthetic Dentistry 13 %
Oral, Maxillofacial, Dental, Implant surgery 27 %



HIGH-TECH DEVICES IN OUR CLINICS

3D Intraoral Scanner and Scraper Devices 3D Printer



Safe Amalgam Filling Removal Device



Flash Bleaching Device



Dental Laser Technology



MEDICAL DEPARTMENTS

ORAL AND DENTAL HEALTH CLINIC - VADISTANBUL

"Orthodontic Treatment with Transparent Plaque" Scanner



All on X Implant Surgery Equipment



Treatment And Follow-Up Of Temporomandibular Joint Disorders



Oblurator Prosthesis Treatment After Maxillofacial Surgeries



DENTAL TREATMENT UNDER GENERAL ANESTHESIA



- Dental treatments in patients with dental phobia
- In disabled patients who cannot cooperate with the dentist
- In children who do not cooperate, treatments are completed in a maximum of 2-4 hours in the operating room.

CASE - 2

Many patients were given new smiles with porcelain veneers that can be prepared quite thin thanks to digital methods.

CASE - 1

Amalgam fillings made in the past were removed with "safe amalgam removal techniques" and the treatment was completed within 1 hour with porcelain fillings with 3d printer technology.



MEDICAL DEPARTMENTS

PAIN CLINIC ULUS - VADISTANBUL

Liv Hospital Algology Clinic aims to increase the deteriorated quality of life of patient's who is suffering chronic pain by examining those who present with pain complaint in detail and conduct their diagnosis and treatment together with a multidisciplinary approach together with other relevant departments. In addition to use of various painkillers in the personalized treatment clinic, interventional pain treatments such as injections applied to the cause of pain are performed as well.

TREATMENTS PERFORMED IN PAIN CLINIC

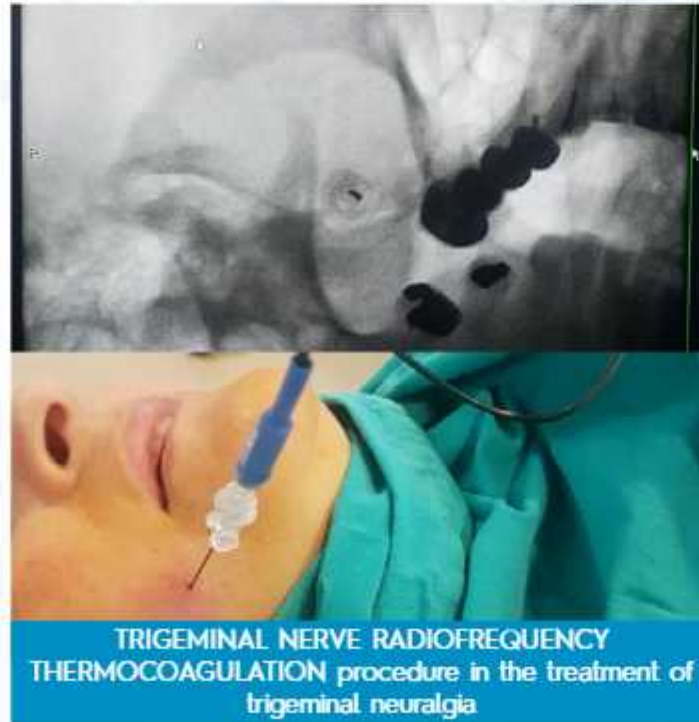
- Low back-leg pains caused by herniated disc and neck-arm pains caused by cervical disc hernia
- Neck and back pains caused by fibromyalgia
- Migraine and tension type headaches
- Pain caused by zona
- Cancer pain
- Pain caused by spinal cord injury
- Pain caused by nerve root compression caused by adhesions formed in the low waist or neck area after surgery (fibrosis)
- Phantom pain occurring after arm and leg amputation
- Peripheral neuropathy pain caused by reasons like diabetes
- Pain related to peripheral nerve diseases caused by circulation failure

SPINAL CORD STIMULATION

It is applied to patients with wounds and pain in their feet and hands due to vascular occlusion, especially with resistant low back pain and Buerger's disease. The electric current provided by the battery placed in the spinal cord, i.e. spinal cord stimulation, dilates the veins; therefore it contributes to the healing of the wounds and additionally decreases pain.



Spinal cord stimulation application



TRIGEMINAL NERVE RADIOFREQUENCY THERMOCOAGULATION procedure in the treatment of trigeminal neuralgia

MEDICAL DEPARTMENTS

PAIN CLINIC ULUS - VADISTANBUL



Treatment of herniated disc related lower back and leg pain

LUMBAR DORSAL ROOT GANGLION
RADIOFREQUENCY THERMOCOAGULATION
LUMBAR FACET MEDIAN NERVE RADIOFREQUENCY
THERMOCOAGULATION
LUMBAR TRANSFORAMINAL STEROID INJECTION
COMPLICATION: 0%
ACTIVITY SUCCESS: 75-80%

As treatment of fibromyalgia related pain,
CERVICAL/THORACIC PARAVERTEBRAL
RADIOFREQUENCY THERMOCOAGULATION application
COMPLICATION: 0%
ACTIVITY SUCCESS: 80%



Treatment of knee osteoarthritis related pain
KNEE INTRAARTICULAR + GENICULAR NERVE
PULSED RADIOFREQUENCY THERMOCOAGULATION
COMPLICATION: 0%
ACTIVITY SUCCESS: 75%



Treatment of rotator cuff syndrome related shoulder pain
SUPRASCAPULAR PULSED RADIOFREQUENCY
APPLICATION
COMPLICATION: 0%
ACTIVITY SUCCESS: 75%



PLANTAR FASIIIT (HEEL SPUR)



RADIOFREQUENCY THERMOCOAGULATION TREATMENT

MEDICAL DEPARTMENTS

ANESTHESIOLOGY CLINIC ULUS



Anesthesia Team can serve for all surgical specialties (pediatric surgery, cardiovascular surgery, gynecology, otorhinolaryngology, general surgery, eye, urology, orthopedics, plastic surgery,...).



The number of the patients that were applied total peripheral block (axillary block, RIVA) was 113 and 468 for whom central block (spinal block, epidural block, combined spino-epidural block) was applied is 468.



Ultrasonography and peripheral block applications



Difficult airway equipment



In obesity surgery or otorhinolaryngology surgery, airway supply devices are used by anesthesiologists in the operating room.

MEDICAL DEPARTMENTS

ANESTHESIOLOGY CLINIC ULUS



Anesthesia applications in specific surgeries.



Application of "Bronchial Blocker" in a case of Pediatric Thoracic Surgery



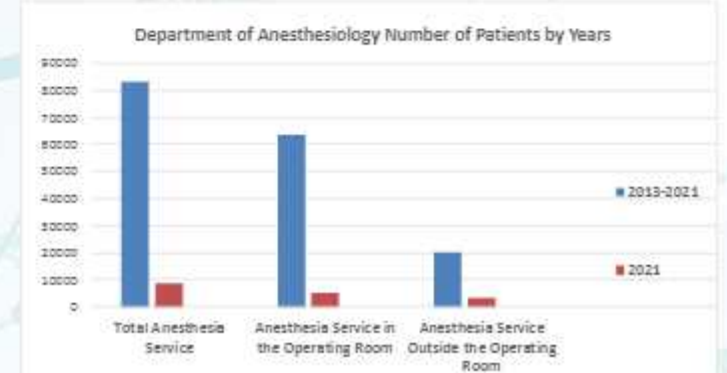
Anesthesia applications over the patients who has been applied neuromonitorization.



Our different pediatric cases

TRAINING ACTIVITIES

- Sedation training in hospital
- In-hospital physician meetings
- Delivery Room
- TARK congress 2021
- Awake Craniotomy and Anesthesia
- CPR Training Program
- Istinje University Faculty of Medicine student training



MEDICAL DEPARTMENTS

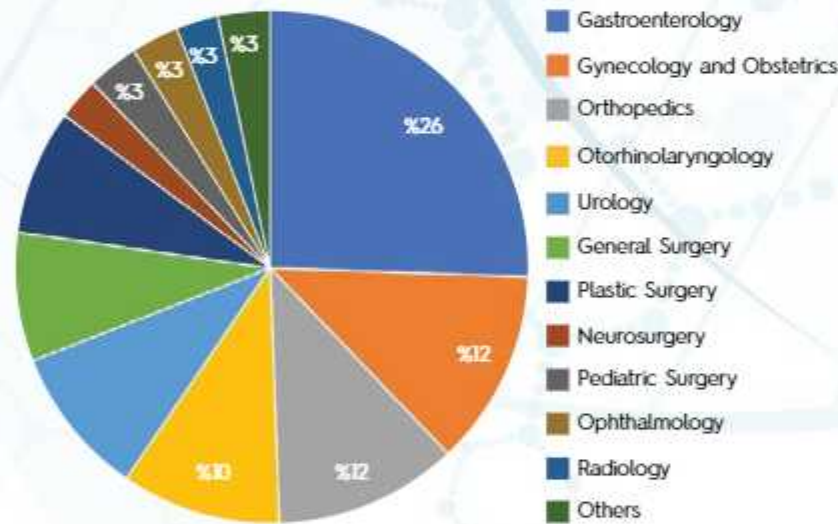
ANESTHESIOLOGY CLINIC VADISTANBUL

In Liv Hospital Vadistanbul Anesthesia and Reanimation Clinic, 2079 patients were given anesthesia in 5 operating rooms over a 6-month period. Apart from general anesthesia and sedoanalgesia, central (spinal, epidural, combined spinal-epidural) and peripheral blocks were applied to the patients. Spinal anesthesia was applied to 117 patients, peripheral block was applied to 8 patients for anesthesia or postoperative analgesia. Epidural catheters were placed to 56 patients. Ages of the six patients who had epidural catheters were placed changes between 5 and 12.

No complications occurred after spinal anesthesia, one patient (1.1%) required general anesthesia. USG device was used to increase success and reduce complications in regional anesthesia methods and invasive procedures. Intra-arterial cannulation was performed for 346 patients and central venous catheterization was performed for 68 patients. Our team also placed central venous ports to 5 patients.

"Patient-controlled analgesia" has been administered to 207 patients for postoperative pain therapy and no complications have occurred.

MAY - DECEMBER 2021



Central venous port placement procedures were started in our clinic in September. Between September and November 2021, 5 central venous ports were placed without complications. The procedures were performed under general anesthesia with scopy and the patients were discharged on the same day.



MEDICAL DEPARTMENTS

ANESTHESIOLOGY CLINIC VADISTANBUL



Thoracoscopic and robotic VATS procedures and single lung ventilation for lung isolation in the presence of bronchopleural fistula in the Intensive Care Unit are performed with fiberoptic bronchoscopy.

CASE

61-year old male patient, whose lung reserve has decreased due to severe scoliosis, had experienced respiratory problems on previous surgical interventions and the urological intervention was planned to be performed under regional anesthesia. Spinal anesthesia applied due to severe deformity was performed with scopy and no complications had occurred.



THE PROFESSIONAL AND SCIENTIFIC ACTIVITIES

- Book Editor: Tuğrul KM, Çamcı AE. Anestezi Günlükleri; Preoperatif Değerlendirme, İstanbul Tıp Kitapevleri, 2021. ISBN:978-625-7291-45-3
- Book Chapter: Tuğrul KM. Antiplatelet Ajanlar. Tuğrul KM, Çamcı AE, Editors. Anestezi Günlükleri, Preoperatif Değerlendirme, İstanbul Tıp Kitapevleri, 2021, p.35-65
- Tuğrul KM. Antikoagulan Ajanlar. Tuğrul KM, Çamcı AE, Editors. Anestezi Günlükleri, Preoperatif Değerlendirme, İstanbul Tıp Kitapevleri, 2021, p.65-79.
- Aygün E, Tuğrul KM. Bitkisel İlaç ve Diyet Takviyeleri. Tuğrul KM, Çamcı AE, Editors. Anestezi Günlükleri, Preoperatif Değerlendirme, İstanbul Tıp Kitapevleri, 2021, p.109-21.
- Abdullah T, Tuğrul KM. Hematolojik Hastalıklar. Tuğrul KM, Çamcı AE, Editors. Anestezi Günlükleri, Preoperatif Değerlendirme, İstanbul Tıp Kitapevleri, 2021, p.121-33.
- Abdullah T, Tuğrul KM. Kanser Hastaları. Tuğrul KM, Çamcı AE, Editors. Anestezi Günlükleri, Preoperatif Değerlendirme, İstanbul Tıp Kitapevleri, 2021, p.133-43.



MEDICAL DEPARTMENTS

BRAIN AND NERVE SURGERY ULUS

In Liv Hospital Ulus Neurosurgery Clinic, diagnosis, treatment and follow-up services are provided in the field of spinal cord and nerve surgery. In the practice of our clinic, adult and pediatric age group surgeries are performed, 60% of which is cranial and 40% is spinal surgery.



Treatment Fields

Brain tumors, skull base and spinal cord tumors:

In adults and children

- Microsurgery and/or endoscopic surgeries: Neuromonitoring, neuronavigation, under intraoperative neuro-ultrasonography control or with awake craniotomy. Using microsurgical tumor staining techniques.
- Neurooncology council planning in multidisciplinary treatment modeling
- Immunotherapy and translational preclinical research and treatment planning

Pituitary adenomas:

- Endoscopic pituitary surgery
- Multidisciplinary treatment planning of adenomas

Brain hemorrhages and vascular diseases:

- Multidisciplinary planning and microsurgical treatment of brain hemorrhages, brain aneurysms, brain glomerulus, brain stem and spinal cord cavernomas

Lower back and Neck Pains:

- Non-surgical treatment planning for lower back and neck pain
- Microsurgical and endoscopic treatment of lower back and neck hernias
- Microsurgical treatment of waist and neck slippage under C-arm CT neuronavigational and neuromonitorization control
- Lower back and neck narrow canal microsurgery treatment

Filling treatment of spinal compression fractures with local anesthesia

Hydrocephalus/collection of fluid on the brain

In adults and children

- Shunt or endoscopic surgical treatment

Trigeminal neuralgia and Hemifacial spasm:

- Microvascular decompression

Chiari Malformation:

Syringomyelia/collection of brain fluid within the spinal cord

- Microsurgery treatment
- Syringopleural shunt surgery

Spasticity

- Selective dorsal rhizotomy
- Baclofen pump therapy

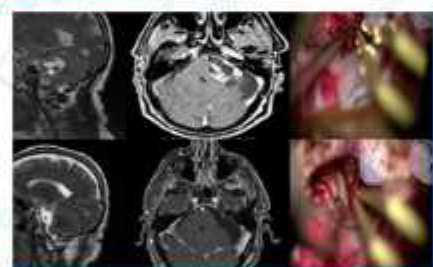
Movement disorders (Parkinson's, dystonia) and functional surgery

- Deep brain stimulation (Brain battery)

Neurooncology Board:

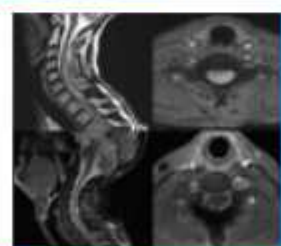
With the coordinatorship of our clinic, neurooncology patients are evaluated and their treatments are planned with the participation of Neuroradiology, Neuropathology, Radiation Oncology, Medical Oncology, Pediatric Oncology and other departments every Tuesday.

CASE - 1



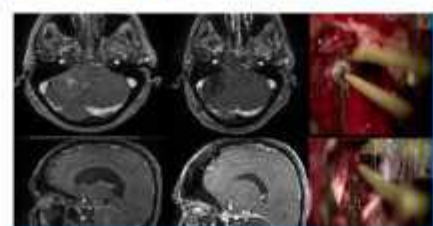
Schwannoma, pre- and postoperative MRI images. Neuronavigation image under microscope.

CASE - 2



Neck region spinal cord tumor. Pre- and postoperative MRI images.

CASE - 3



Benign brain tumor (Meningioma) pre- and postoperative MRI images. Neuronavigation image under microscope.

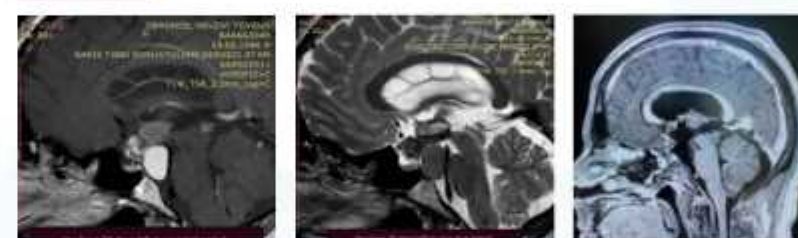
MEDICAL DEPARTMENTS

BRAIN AND NERVE SURGERY VADISTANBUL

Cranial tumor surgeries were mainly performed in Liv Hospital Vadistanbul Brain and Nerve Surgery Clinic. Treatment plans were created by attending the Oncology Council in specific tumor cases. Cases with pituitary pathologies were evaluated preoperatively and postoperatively at the multidisciplinary Pituitary Council held monthly.



CASE - 1



The case of adult craniopharyngioma with suprasellar location extending anteriorly, into the third ventricle and posteriorly in front of the pons, was successfully removed in total with endoscopic extended transsphenoidal method.

CASE - 2



4-month-old baby girl, a case of sagittal and left lambdoidal suture craniosynostosis.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- **Prof. Dr. Tufan Hiçdönmez** / Panelist- Turkish Neurosurgery Society, TNDER, 34th Scientific Congress, 1.10.2021, Online, Presentation/Panel: Craniosynostosis. Conservative treatment cases and late-term surgical cases.
- **First International Balkan Congress Neurology & Neuroscience, Tekirdag** Neurology Research Association, Tekirdag 01.10.2021 - 03.10.2021. Sessions Moderator.
- **Prof. Dr. Nurperi Gazioğlu** / Sessions Moderator 6th Pituitary Symposium "Complicated Pituitary Cases" - 5-6 November Ankara
- **Prof. Dr. Nurperi Gazioğlu** / 16th Pituitary Symposium, Conference "Aims and Complications of Pituitary Surgery: How to Achieve Successful Results?" - 5-6 November Ankara
- **Prof. Dr. Nurperi Gazioğlu** / Sessions Moderator - Endokurs 5, Turkish Society of Endocrinology Metabolism Postgraduate Training Course 10-14 November, Antalya - Pituitary Council
- **Prof. Dr. Tufan Hiçdönmez** - Past and future of neurosurgery in Turkey. Kartal Dr. Lütfi Kırdar State Hospital Neurosurgery Clinic Seminar, 17.09.2021
- **Prof. Dr. Tufan Hiçdönmez** - Craniosynostosis. Umraniye Training and Research Hospital Neurosurgery Clinic Seminar, 06.10.2021
- **Prof. Dr. Tufan Hiçdönmez** Tumours of the limbic and paralimbic systems - Current Approach to Central Nervous System Tumors- Liv Hospital Scientific Meeting-1 November 2021
- **Prof. Dr. Tufan Hiçdönmez** - Izmir Online Neurosurgery Webinars- Craniosynostosis- 15.7.2021
- **Prof. Dr. Nurperi Gazioğlu** - Current Approach to Central Nervous System Tumors - Liv Hospital Scientific Meeting Organization, Opening Speech, "Changing Paradigm in Craniopharyngioma Surgery" - 1 November 2021
- **Prof. Dr. Tufan Hiçdönmez** - Member of the Jury of the University of Health Sciences Specialty Examination and the opening of the Neuroanatomy Laboratory named after him
- **Prof. Dr. Nurperi Gazioğlu** - "Socio Benemerito" award of the Italian Neurosurgery Association, which has been given to 8 Italian members who have made significant contributions to Italian Neurosurgery.

MEDICAL DEPARTMENTS

BIOCHEMISTRY LABORATORY ULUS

At Liv Hospital Ulus Biochemistry Laboratory, processes for the safety stages of all employees and test results were updated and put into practice for Covid-19 pandemic.



PERFORMANCE INDICATORS FOR 2021

	2021 (%)	TARGET(%)
INCORRECT REPORTING	0	0
RATE OF DELAY IN NORMAL TEST REQUESTS	0	5
RATE OF DELAY IN EMERGENCY TEST REQUESTS	0	5
RATE OF PRE-ANALYTIC ERROR	0,6	0
RATE OF ANALYTIC ERROR	0	1
RATE OF POST ANALYTIC ERROR	0	0

QUALITY STUDIES

External quality control studies were carried out and evaluated on a monthly basis throughout the year; all the processes were updated in order to obtain adequate results in accordance with the desired targets.

Biochemistry, hormone and hematological tests every month, serologic tests every 3 months, and TORCH panel tests were subjected to external quality control studies and targeted quality values were reached.

"576048 tests were studied in 2021."

Tests Started to be Studied in 2021

- "SARS-Cov-2-IgG (Quantitative)"
- "Brain Tumor Cancer Panel"
- "Neurofascin 155 (IgG&M)"
- "Hormone Metabolites"
- "Anti-Mi-2 Antibody IgG"
- "Fluoxetine"
- "Sertraline"
- "Solid Tumor Cancer Panel (149 Gene)"
- "Lymphoma Fusion Panel (125 Gene)"



MEDICAL DEPARTMENTS

BIOCHEMISTRY LABORATORY VADISTANBUL

Liv Hospital Vadistanbul Laboratory operates as a Biochemistry, Microbiology and Blood Transfusion Center. Biochemistry, hormone, hematology, urine, serology, coagulation tests are studied in the laboratory, daily and monthly follow-ups of all tests are carried out regularly.

QUALITY CONTROL STUDIES

Monthly performance evaluations of all tested tests were carried out by accredited external quality control firms.

TEST PANEL UPDATES

Test panels are renewed in line with the needs of physicians and it is essential to produce accurate and reliable results for patients.

Newly added tests in 2021

- Microalbumin level in urine
- Anti-thyroglobulin antibody
- Thyroid peroxidase antibody
- MAD MAX Molecular Allergy Test
- Food Allergen Panel, Child Allergen Panel, Respiratory Allergen Panel
- Heparin-Induced Thrombocytopenia (HIT)
- Tacrolimus level
- Food Intolerance Imupro panels



SCIENTIFIC AND OCCUPATIONAL ACTIVITIES

"Smart Laboratory Platform that enables the Structuring of the Central Laboratory Directorate and Optimizing the Laboratory Workflow" panel and trainings were held for all MLP Care specialities.

MEDICAL DEPARTMENTS

CHECK UP AND HEALTHY LIFE CLINIC ULUS

Liv Hospital Ulus Check Up and Healthy Living Clinic continues its activities with programs aimed at supporting healthy living and screening diseases. In the programs, most appropriate options for the needs and demands of the guests are offered and personalized contents are prepared when necessary.

EXCLUSIVE VE CHECK UP DEPARTMENT



High satisfaction is aimed with Exclusive Check-up, which is specially prepared for the individual, creating a special and attentive touch for your health. Exclusive Check-Up, which will make you feel the comfort of your house, adds a new dimension to the approach of check-up with regular follow-up of personal health data and personalized guest services consultant. Medical coaches provide personalized services and programs for quality life and healthier body and soul.

OUR CHECK UP SERVICES

- Liv Cancer Screening Program (Whole Body and Colon-Digestive System Cancers)
- Exclusive Check Up
- Liv Online Plus
- Active Plus
- Cardiovascular Check Up
- Virtual Coronary Angiography
- Athlete's Check Up
- Breast Cancer Program
- Lung Cancer Program
- Skin Cancer Program
- Prostate Cancer Program
- Gynecologic and Urogenital Cancer Program
- Thyroid Cancer Program
- Brain Check Up
- Risk Assessment in Occlusive Cerebrovascular Diseases
- Virtual Colonoscopy
- Whole Body MRI in Cancer Diagnosis
- Check Ups Specially Programmed for You
- I Protect My Immunity Check Up
- Post Covid Check up

CASE

The patient who had been smoking for many years, was having his routine controls during check up. A small lesion was detected on Lung tomography. After the follow ups, it was considered as a possibility of a cancer and the patient was operated. Indeed, a tumor at his beginning stage was detected. Maybe an early diagnosis saved the patient's life.

MEDICAL DEPARTMENTS

CHECK-UP AND WELLNESS CLINIC VADISTANBUL

Liv Hospital Vadistanbul Check-up Clinic provides service with 2 specialist doctors, 1 cardiologist, 1 dietitian and 4 nurses. Examinations of patients in the hospital are being done in a single center, their blood is taken, ECG - ECHO - EXERTION examinations, cardiology and dietitian examinations are performed. Radiological examinations are performed on the same floor.

DIFFERENT CHECK UP PACKAGES OFFERED

A wide range of check-up options are offered, which are determined according to the needs of patients. At Vadistanbul Check up Clinic, where modern technology is used, 2 patient reception staff and 1 patient consultant accompany our patients one-on-one during the procedures. There are many check-up programs such as cancer screening, post-Covid health, check-ups for women, men and children by age groups, gastroenterology, endocrinology, advanced cardiological diagnosis, athlete health, breast and prostate check-ups.

GENETIC CHECK UP SERVICES

The clinic also offers genetic counseling and genetic check-up services with 2 genetic specialists.

DIAGNOSE OF CANCER BY BLOOD TEST

Early detection of more than 50 cancers is possible with an error of less than 1 percent with just a simple blood test at the Liv Hospital Check Up Clinic. In the cancer test performed by blood test, cancer can be diagnosed at the first stage by looking at the DNA structures formed by the cancerous cells.

POSSIBLE TO CATCH WITH NO SYMPTOMS

The test works on the basis of DNA, which, unlike classical tests, indicates the presence of a cancerous tumor. In this way, many important and deadly cancer types such as bowel, liver, prostate and ovarian cancer can be detected even in the very early stages of the disease, when there are no symptoms. There is a chance to catch some cancers such as pancreatic, esophageal, ovarian and stomach cancers, which have not been diagnosed early until now, at the very beginning of the process.



MEDICAL DEPARTMENTS

PEDIATRIC HEALTH AND DISEASES CLINIC ULUS - VADISTANBUL

Liv Hospital Pediatric Clinic offers the most up-to-date diagnosis and treatment services for children's health. Second opinion services are provided for the diagnosis and treatment of difficult, complex and rare diseases together with Boston Children's Hospital, which is one of the training and research hospitals of Harvard Medical School and has been shown as the best hospital in the USA in the ranking of children's hospitals for years. Within the framework of this agreement, joint scientific meetings and research projects are carried out with Boston Children's Hospital.



Diagnosis and treatment of all pediatric patients between the ages of 0-18 can be made in the pediatric outpatient clinics, patient service and emergency services for 24 hours in the clinic.

Other Departments

- Pediatric Nephrology
- Pediatric Rheumatology
- Pediatric Cardiology
- Pediatric Endocrinology
- Pediatric Infectious Diseases
- Pediatric Allergy and Immunology
- Pediatric Gastroenterology
- Pediatric Neurology
- Pediatric Hematology and Oncology
- Pediatric intensive care
- New born unit



- In Liv Hospital Neonatal Intensive Care Unit, which has the title of "Baby-Friendly Hospital", everything from patient visits to baby care is implemented in a parent-oriented manner. Families spend a lot of time with their babies and can have contact with them.
- Each baby is kept in a separate room, therefore the risk of infection, which is the most frequent problem newborns face, is reduced to minimum.
- A rational antibiotic usage is provided for all hospitalized babies, we are very selective about giving antibiotics.
- Experienced hands work together in the fields of pediatric neurology, pediatric cardiology, cardiovascular surgery, retina and neurosurgery in the Neonatal Unit. Many examinations such as ultrasounds, ophthalmologic examination, hearing screening and cardiac ECHO are performed at patient side without moving the baby at all.
- In the Newborn Unit, which gives great importance to breast milk, the rate of formula for infants in the infant follow-up department is below 5%.
- The "holistic child health" program includes pediatricians, sleep consultants, breastfeeding consultants, parent consultants, child and adolescent-focused clinical psychologists, play therapists, child development specialists, special education specialists, and floortime therapists. All development and intelligence tests are applied.

MEDICAL DEPARTMENTS

PEDIATRIC HEALTH AND DISEASES CLINIC ULUS - VADISTANBUL

MULTIDISCIPLINARY DIAGNOSIS AND TREATMENT PROGRAMS

Diagnostic and Treatment for Rarely Seen Diseases
 Holistic Child Health Program
 Obesity Program
 Gender Development Disorder Program
 Adolescent Health Program
 Turner Syndrome Program
 Thyroid Cancer In Children And Adolescents Program
 Nutrition And Deglutition Disorders Program
 Tube Feeding Program
 Chronic Abdominal Pain Program
 Celiac Disease Program
 Inflammatory Bowel Disease Program
 Hepatobiliary Diseases Program
 Holistic Child Health Program
 High-Risk Newborn Program
 Abnormal Menstrual Bleeding In Adolescent Girls Program
 Brain Tumors Program
 Hemangioma And Vascular Malformation Program
 Cerebral Palsy And Spasticity Program
 Epilepsy Program
 Uveitis Program
 Juvenil Idiopathic Arthritis Program
 Muscle And Joint Pain Program
 Scleroderma Program
 Psoriatic Arthritis Program
 Autoinflammatory Diseases Program
 Hypertension Program
 Constipation Program
 Gastroesophageal Reflux Program
 Fetal Surgery Program
 Intra-Abdominal Solid Tumor Program
 Spina Bifida Program
 Enuresis And Urination Problems Program

Hydronephrosis Program In Children
 Hydrocephalus Program
 Arachnoid Cysts Program
 Craniosynostosis Program
 Pituitary Tumors Program
 Bone Tumors
 Cerebrovascular Surgery And Interventions
 Fetal Cardiology Program
 Neonatal Cardiac Intensive Care Program
 Heart Catheterization And Interventional Cardiac Treatment Program
 Adult Congenital Heart Diseases Program
 Pulmonary Hypertension Program
 Heart Failure Program
 Single Ventricle Program
 Developmental Hip Dysplasia Program
 Torticollis Program
 Foot Deformities Program
 Limb Lengthening Program
 Pediatric Spinal Deformities Program
 Scoliosis Rehabilitation Program
 Sports Injuries Program
 Brachial Plexus Injury Program
 Fetal Cardiology Program
 Atopic Dermatitis Program
 Food Allergy Program
 Down Syndrome, Immunization And Vaccination Program
 Severe Urticaria And Pruritus Program
 Severe Asthma Program
 Sinonasal Diseases Program
 Congenital And Developmental Cataract Program

CASE - 1

A rare case with Proteus syndrome, Wilm's tumor, and pulmonary stenosis

A 2.5-year-old girl was evaluated pediatrically for asymmetric extremity hypertrophy before the orthopedic surgery. Atypical facial appearance, pallor, capillary hemangioma covering the right side of the whole body, giant toes and extremity anomalies were observed. Two hypoechoic masses of 28x12mm and 12x10 mm were observed in the left kidney in abdominal USG and MRI. Stenosis starting from the level of the pulmonary valve was detected in ECHO. Tumor excision and partial nephrectomy were performed together. Pathological evaluation was interpreted as Wilm's tm. The patient was scheduled for vincristine and actinomycin-d chemotherapy. Epiphysiodesis was applied to the left lower extremity. The patient was discharged with current findings without complication.

MEDICAL DEPARTMENTS

PEDIATRIC HEALTH AND DISEASES CLINIC ULUS - VADISTANBUL

CASE - 2

Treatment of severe hypercalcemia in a child with Williams syndrome with a single dose of IV zoledronate

A 2-year-old girl was brought for the complaints of delayed walking and speaking, and constipation and hypercalcemia that continued for 6 months. Williams syndrome was clinically considered based on physical examination and the pixie-like appearance. In the FISH analysis performed in Istinye University Genetics Laboratory, deletion of the 7q11.23 (WBSCR) region was detected and the diagnosis of Williams syndrome was confirmed. The serum calcium level of the patient who was found to have hypercalciuria and nephrocalcinosis, which was 14 mg/dl before the treatment, decreased to 10 mg/dl within 3 days and no increase was observed in the next 6 months follow-up.

CASE - 3

2-year-old female patient with Prohormone Convertase 1/3 deficiency

Our smallest endoscopy procedure patient is a 2-month-old baby weighing 2700 g and she was admitted with chronic diarrhea, severe acidosis, hyponatremic dehydration and severe hypoglycemia, which started when she was 10 days old, from another center, and after endoscopic evaluation, she went under molecular analysis and diagnosed with "Prohormone Convertase" 1/3 deficiency. PCD 1/3 deficiency is very rare and approximately 20 cases have been recorded all over the world until today. Our case will make an important contribution to the literature in the differential diagnosis of congenital diarrhea with her unique findings in this group.



CASE - 4

An 11-year-old girl who presented with fever of unknown origin. An 11-year-old female patient presented with complaints of persistent fever for 2.5 months, diffuse muscle and joint pain, and rash. In the physical examination; She had weak, poor, pale appearance and an urticarial rash increasing with fever. Patient was diagnosed with Systemic type Juvenile Idiopathic arthritis (sJIA) disease and macrophage activation syndrome based on clinical and laboratory findings, and anti-IL-1 therapy and prednisolone were started for the patient who did not respond to IVIG and steroid therapy. The patient, whose fever is healed with this treatment and whose laboratory values gradually returned to normal, was discharged with anti-IL-1 and prednisone. In our case, the patient was diagnosed with sJIA, which is rarely seen in the differential diagnosis of fever in childhood, but should be considered and difficult to diagnose, in a short time and its treatment was successfully performed.



MEDICAL DEPARTMENTS

PEDIATRIC HEALTH AND DISEASES CLINIC ULUS - VADISTANBUL

THE PROFESSIONAL AND SCIENTIFIC ACTIVITIES

- A rare case with Proteus syndrome, Wilm's tumor, and pulmonary stenosis **Pinar Karadeniz, Tulin Tiraje Celkan, H. Murat Mutus, Senol Bekmez, Nuh Yılmaz, Selami Sozubir**, 2nd International Pediatrics and Gynecology Congress, Antalya 21-24.10.2021 Online Presentation
- A safe and effective tool for diagnosis of congenital heart disease in neonates and infants during Covid-19 pandemic. Video-tele-echocardiography on Whatsapp. **Nuh Yılmaz, Yılmaz Akbaş, Ferhat Sarı, Çiğdem El, Esra Yazarlı, Cevriye Kübra Cenkçi**, 2nd International Pediatrics and Gynecology Congress, 21-24th October Antalya, Oral Presentation

Prof. Dr. Ozan Özkaya

- Approach to the child with Urinary Tract Stone, Innovations in Pediatric Disease, 9th September, 2021
- Transplantation in primary hyperoxaluria, ciliopathy and metabolic diseases. Pediatric Kidney Transplantation Update Symposium-III, 6th March, 2021
- Approach to the child with musculoskeletal pain, International Contemporary Medical Academy
- Complement system at FSGS, Pediatric Nephrology Congress, 4-5th September, 2021
- Vesicoureteral reflux from childhood to adult: 38th National Nephrology Congress

Prof. Dr. Cengiz Kara

- Clinical Reflections of Molecular Causes in Pediatric Thyroid Dysfunctions. 4th Ege Endocrine Diseases and Genetics Symposium, 12-13th March 2021
- Consult the Specialist: Thyroid Disorders. Cerrahpaşa Pediatrics Days, 15-18th April 2021
- Thyroid Dysfunctions in Newborns and Infants. 43rd Pediatrics Days, 30th May-2nd June 2021
- Management of Early Puberty. Pediatric Endocrinology and Diabetes Association 6th Advanced Pediatric Endocrinology Course, 11-13th June 2021
- Contemporary Overview of Obesity and Metabolic Syndrome Pediatric Endocrinology and Gastroenterology Intersections Joint Symposium, 18-19th June 2021
- My Child Eats Too Much; What should I do? Turkish National Pediatric Association, One Day of the Pediatrician (Interactive - with Cases) Training Meeting, 30th September - 3rd October 2021, Cyprus
- Obesity XXV. National Pediatric Endocrine and Diabetes Congress, 7th. Introductory Course to Pediatric Endocrinology, 6-7th October 2021, Antalya
- Approach to Neonatal TSH Elevation. XXV. National Pediatric Endocrine and Diabetes Congress, 6-10th October 2021, Antalya
- The Role of the Pediatrician in the Management of Short Stature: When Should We Consult Pediatric Endocrine? 65th Turkey National Pediatric Congress, 3-7th November 2021, Antalya
- Congenital Hypothyroidism 1st Eastern Congress of Pediatric, 18-21st November 2021, Diyarbakır

Prof. Dr. Gül Nihal Özdemir

- Von Willebrand Academy: Von Willebrand Patient Management Strategy Online Meeting, March 2021
- Hemophilia A Treatment Online Meeting, January 2021
- Hemophilia B Treatment and Pharmacokinetics Online Meeting, March 2021
- Hemophilia Academy speaker: aPCC and ITI Experience, MAR 2021
- Overlooked in Von Willebrand's disease: Bleeding disorder and menorrhagia online meeting, April 2021
- ICMAS Academy: Approach to the patient with bleeding disorder, July 2021
- Innovations in Pediatrics: Approach to hemangiomas and vascular malformations, September 2021
- 18th International Hemophilia Congress: Diagnosis and treatment in hemophilia, September 2021
- II. International Congress of Pediatrics and Gynecology. Purpura fulminans treatment, October 2021
- "Hemophilia in life with Novoeight", October 2021
- 26. Turkey Hemophilia Camp, October 2021
- National Hematology Congress: DOAC treatment in children, November 2021
- EHOC congress: Thrombocytosis in children, November 2021
- Pharmacokinetics in Hemophilia B Online meeting, November 2021

MEDICAL DEPARTMENTS

PEDIATRIC HEALTH AND DISEASES CLINIC ULUS - VADISTANBUL

Prof. Dr. Makbule Eren

- Pediatric Endoscopy and Colonoscopy. International Contemporary Medical Academy, 30.06.2021, online meeting
- Approach to Congenital Diarrheal Disorders. Innovations in Pediatric Diseases, September 7-10, 2021, Online Meeting
- Nutrition and Swallowing Problems in Cerebral Palsy. High-risk Baby: Cerebral palsy symposium. 21.01.2021, Ulus Liv Hospital, online meeting
- Cholestasis states with high GGT 13th National Pediatric Gastroenterology, Hepatology and Nutrition Congress" 19-22nd May 2021, Online meeting

Prof. Dr. Tülin Tiraje Celkan

- Novo Nordisk 7 to 8 Hemophilia in Life Meeting, 11th February
- HEVES Protein C Deficiency, 19th February
- Istanbul Lions Child Cancer Information, 23rd February
- Young Pediatricians with Childhood Thrombosis Cases, 6th March
- 2nd Translational Reserche Conference Erythropoiesis Control and Ineffective Erythropoiesis From Bench To Bedside / Verbal Statement
- Why Standard Treatment for Bayer Hemophilia, 9th March
- Dokuz Eylül Congress Approach to the Child with Hemorrhage with Cases, 26th March 2021
- Use of Takeda Feiba, 31st March
- Benefix Pfizer from Childhood to Youth, 6th April
- Cerrahpasa Pediatrics Days, Consult the Specialist - Hemogram Evaluation, 15-18th April
- Cerrahpasa Pediatrics Days - Prolonged Fever Puzzle, 15-18th April
- Blood Use Guideline Pediatrics, 30th April
- Protein C Advisory Board, 21th June
- ICMAS Thrombocytopenia Speech, 30th June
- European Union Blood Use Guide trainer, transfusion talk in pediatric cases, 27th October
- Liv Hospital Brain Tumors Session, Tips for Early Diagnosis of Pediatric Brain Tumors, 1st November
- EHO primary bone marrow deficiency discussion, 11th November
- Altınbas University and TPHD BMTCourse for Hematology minor specialists who don't have a Bmt center: Conference on bone marrow and microenvironment

Assoc.Prof. Dr. Gönül Çatlı

- Differential diagnosis of short stature. 22nd Dokuz Eylül Pediatrics Days. 25-27th March 2021, Online congress
- Effects of long-term treatment and optimal treatment approach in SGA cases, Nordipeva case discussions, June 1, 2021, Online meeting
- Approach to delayed puberty, Introduction to Pediatric Endocrinology Course, 25th National Pediatric Endocrinology and Diabetes Congress, 6-10th October 2021, Antalya
- Annual meeting, Pituitary and Neuroendocrinology, 25th National Pediatric Endocrinology and Diabetes Congress, 6-10th October 2021, Antalya
- Evaluation of Serum MOTS-c Level and MOTS-c Gene Polymorphism 'rs111033358' in Adolescents with Polycystic Ovary Syndrome (Project Manager and Responsible, TUBITAK APPROVED PROJECT, (Project No: 220S651), 2021
- Gönül Çatlı, Sezer Acar, Gülten Cingöz, Khayala Rasulova, Ayça Yarım, Hamide Uzun, Tuncay Küme, Sefa Kızıldağ, Bumin Nuri Dündar, Ayhan Abacı. Oxytocin Receptor Gen Polymorphism and Low Serum Oxytocin level are Associated with Hyperphagia and Obesity in Adolescents. Prof. Dr. Sezai Bedrettin Tümay Research Awards 2021. (Research First Prize)

Spec. Dr. Adil Umut Zübarioğlu

- 'Nasal CPAP and noninvasive ventilation: Applications in intensive care. 9th Child Friends Congress; Approach to Neonatal Respiratory Support Course. 16-20th March 2021, ISTANBUL.
- 'Management of the newborn with critical congenital heart diseases: Case Based Discussions'. ICMAS, 28th July 2021.
- 'PICC Catheter Application Indications - Vein Selection - Venous Anatomy'. 29th National Neonatology Congress (UNEKO-29): Peripheral Inserted Central Catheter (PICC) Course. 6-10th October 2021, Antalya.

MEDICAL DEPARTMENTS

PEDIATRIC HEALTH AND DISEASES CLINIC ULUS - VADISTANBUL

Dr. Lect. Nuh Yılmaz

- Vein of Galen aneurysmal malformation in two neonates. 13th International congress of innovations in cardiology and cardiovascular surgery, March 2021. Online congress
- Proteus syndrome, Wilm's tm, pulmonary stenosis coexistence. Oral case presentation. 2nd International Obstetrics and Gynecology Congress. 21-24th October 2021. Antalya
- A safe and effective tool for diagnosis of congenital heart disease in neonates and infants during Covid-19 pandemic. Video-tele-echocardiography on Whatsapp. 2nd International Obstetrics and Gynecology Congress. 21-24th October 2021. Antalya

CONGRESS/SYMPOSIUM -CHAIRPERSON/MODERATOR

Prof. Dr. Ozan Özkaya

- Important Findings in Rheumatic Diseases, Başkent Pediatrics Days: 17th April 2021
- Approach to the child with urinary incontinence, 9th Child Friends congress, 16-20th March 2021
- Pediatric Rheumatology Monthly Training Meeting, 14th April 2021
- Workshop optimising teaching skills for medical academians, Istinye University
- The growing problem of our age: Obesity and hypertension 56th Turkish pediatrics congress, 17-20th October
- Pediatric Rheumatology Meeting, II. Pediatric Health and Gynecology Congress 21-24th October, 2021
- Early Brain Development and new roles for Pediatricians, 28th October 2021

Prof. Dr. Cengiz Kara,

- 10th Pediatric Endocrinology Case Reports Symposium, 9-10th April 2021
- ÇEDD 6th Advanced Pediatric Endocrinology Course, 11-13th June 2021
- Pediatric Endocrinology and Gastroenterology Intersections Joint Symposium, 18-19th June 2021
- ÇEDD 7th Introductory Course to Pediatric Endocrinology, 6-7th October 2021,
- Innovations in Pediatric Diseases Symposium, 7-10th September 2021

Prof. Dr. Makbule Eren

- 7th Session 13th National Pediatric Gastroenterology, Hepatology and Nutrition Congress" 19-22nd May 2021, Online meeting. Session Pediatric Hematology Oncology Care Course" 29th May, 2021

Prof. Dr. Gülşen Köse

- High-Risk Baby / Cerebral Palsy Symposium - 23rd January 2021 - Organizer, Spokesperson
- Stem Cell and tissue engineering symposium. 27-28th February 2021. Online.
- IX. Child Friends Congress, 16 - 20th March 2021 Online
- Innovations in Pediatric Diseases 7-10th September 2021 Online
- 23rd National Congress of Child Neurology. Swiss hotel/Izmir. 27-31st October 2021

Prof. Dr. Tülin Tiraje Celkan

- Istanbul Oncology Institute Pediatric Oncology Council Monthly Moderator Duty - March 2021
- 13th Bone Marrow Congress Pediatrics Meeting, 3rd April
- Hemophilia Congress New Treatments in Hemophilia, 21st September
- TPHD Meeting Importance of Cases in Pediatric Hematology Specialization, 14th October
- TPK Congress Hematology Meeting, 18th October
- Sağlık Bilimleri University Congress Pr C deficiency in newborns and HIE cases from the perspective of forensic medicine oral presentation, 23rd October
- THD congress chairperson and THD association auditor presentation, 4-7th November
- Together with Boston Children's Hospital, Innovations in Childhood Hematology Chairperson - 7th September
- TDH Laboratory Course Moderator and Spokesperson, 11th April
- Development of Pediatric Health and Diseases Specialist Training Programs Commission Membership Meeting, 29th June
- Turkey- preperation of European Union Blood Use Guideline, 11th January

Assoc.Prof. Dr. Mehmet Taşdemir

- Consult the Specialist: Cerrahpaşa Pediatrics Days

MEDICAL DEPARTMENTS

PEDIATRIC SURGERY AND UROLOGY ULUS - VADISTANBUL

Liv Hospital Pediatric Surgery and Urology Clinic provides services to solve all the problems, including pediatric surgery and urological problems, of children under the age of 18, starting from the prenatal period and including the newborn period with its infrastructure and team. All diagnostic, interventional and treatment applications in the clinic can be performed using open surgery, laparoscopic surgery and endoscopic surgery methods.

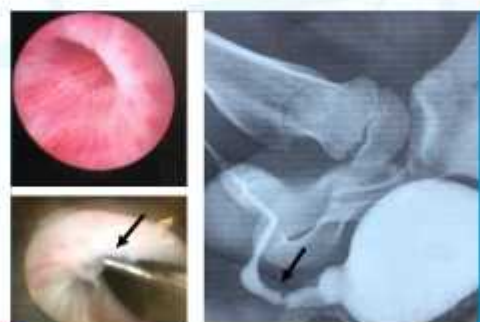
In Liv Hospital Pediatric Urology Diagnosis and Treatment Clinic, latest technology diagnostic devices such as uroflowmetry, EMG, bladder ultrasound are used for the diagnosis and treatment of urinating and urinary bladder dysfunctions, urinary incontinence or enuresis, bed-wetting which are significant urologic problems of children and spina bifida which is a congenital anomaly, and computer based urotherapy treatment is applied.



Liv Hospital Ulus Pediatric Surgery and Urology Team is primarily aware that the child is not a miniature version of the adult, but a separate entity with its own physiological, anatomical and psychological characteristics. For this reason, the most important goal of our clinic is the complete success for the child not only in the operation, but also in the pre- and post-operative care. Children are carefully prepared for the operation psychologically with specially prepared booklets in the pre-operative period. Together with the anesthesia team experienced in pediatric anesthesia, it is ensured that the operation would be comfortable and painless for the child starting from the preoperative period. Special methods such as caudal anesthesia are performed to ensure that the child has a more comfortable and painless postoperative period.

CASE - 1

A 5-year-old male patient presents with recurrent urinary tract infections. In his anamnesis, it is determined that he has occasional urinary hesitancy. Urinary system USG reveals thickening of the bladder wall and a significant post-void residual. On voiding cystography, stenosis and proximal enlargement were observed on the posterior urethra. The posterior urethral valve detected with cystoscopy is ablated with a cold knife. The patient is currently urinating without any problems. In the control USG performed 3 months later, it is determined that the thickening of the bladder wall has decreased significantly.



CASE - 2

A 3-year old male patient presents with a palpable mass on the upper left quadrant of the abdomen. In radiological examinations, neuroblastoma with left adrenal origin is considered. 10x10 cm tumor mass of the patient is removed via surgery. The patient continues his life without a tumor after receiving chemotherapy postoperatively.

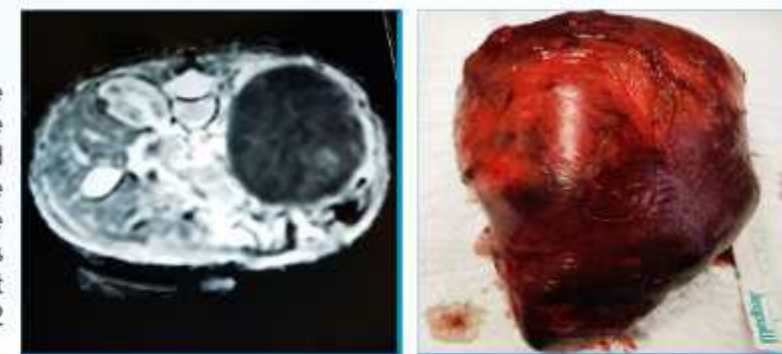


MEDICAL DEPARTMENTS

PEDIATRIC SURGERY AND UROLOGY ULUS - VADISTANBUL

CASE - 3

A 2-year old foreign female patient, presented for the huge mass visible from outside on the left side of the abdomen. She was told, she could not be operated in her country. Bilateral Wilms tumor involving the left kidney completely and partially affecting the right kidney is detected. The tumor in both kidneys is completely removed with surgery. The patient continues her life without a tumor after receiving 2 cycle of chemotherapy postoperatively.



PEDIATRIC UROLOGY PROGRAMS

- Solid Abdominal Tumors in Children Program
- SPINA BIFIDA PROGRAM
- Enuresis and Urination Problems in Children Program
- Hydronephrosis in Children Program

The Program of Problems with Urination in Children

Pediatric Surgery and Urology, Pediatric Nephrology, Child and Adolescent Psychiatry, Pediatric Neurosurgery, Radiology Clinic offers a multidisciplinary approach to the disease.



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Selami Sözübir

- Symposium on Diseases Associated with Nutritional Problems in Children
- 'Kidney Stones and Nutrition' - 19-12-2020
- High-risk Baby Cerebral Palsy Symposium - 'The Role of Pediatric Surgery in the Treatment of Cerebral Palsy'- Spokesperson- 23-01-2021
- Pediatric Hematology Care Course - Pediatric Hematology and Pediatric Surgery - Spokesperson- 30-04-2021
- 11th National Pediatric Urology Congress - External Genital Anomalies - Case Reports - Panelist & Spokesperson: 22-10 -2021
- 16th Family Medicine Congress - What is Hiding Under the Diaper of Children - Spokesperson- 23- 10-2021

Prof. Dr. Cem Akbal

- 5. National Urological Surgery Congress Treatment Methods in Obstructive Megaureter: Pros and Cons - 7-15 November
- 16th Turkish Congress of Pediatric Urology - Lifelong Pediatric Urology - Chairperson - 26-28 November
- 16th Turkish Congress of Pediatric Urology - Functional Voiding Disorders and Enuresis - Approach to Cases of Resistant Enuresis - 26-28 November

Dr Öğr. Üyesi H. Murat Mutuş

- 22nd EUPSA (European Pediatric Surgical Association) Congress Atina - Poster Presentation: - Utilization of Giant Uretral Diverticular Tissue as a Skin Flap for Penile Shaft Covering After Complicated Proximal Hypospadias Repair - 1-5. 09.2021

MEDICAL DEPARTMENTS

DERMATOLOGY ULUS

Liv Hospital Ulus Dermatology Clinic provides services in the fields of General Dermatology, Pediatric Dermatology and Aesthetics-Cosmetics.

GENERAL DERMATOLOGY

- Chronic skin disorders (Psoriasis, eczema treatment, acne treatment, fungal, viral and bacterial diseases of the skin)
- Sexually transmitted diseases
- Hair disorders (Detailed hair analysis with Trichoscopy and Trichogram)
- Nail diseases
- Vascular anomalies
- Diagnosis and treatment of skin cancers.

PEDIATRIC DERMATOLOGY

- Rare and genetic skin disorders
- Atopic dermatitis, a chronic inflammatory disease
- Vascular anomalies
 - Infantile hemangiomas and cutaneous capillary malformations (Port wine stain)
 - Rare or syndromic cases
- Laser treatments (595 nm Pulsed Dye Laser and/or 1064 nm Nd:Yag laser)

CASE - 1



Facial capillary malformation, significant reduction in lesion area and color after 4 sessions of 595 nm Pulsed Dye Laser treatment.

COSMETICS AND AESTHETICS DERMATOLOGY

- Botox Applications
- Filling Applications
- Mesotherapy Applications
- Hair loss treatment (with PRP and vitamins)
- Hanger Applications
- Stem Cell Administration
- Laser Applications
- HIFU (High-intensity Focused Ultrasound)
- Gold Needle (Fractional multipolar radiofrequency application)
- Ozone Therapy

CASE - 2



8-year old female patient Combined venous and lymphatic malformation progressing from the vulvar, gluteal, perianal region to the lateral of the foot. She previously had oral sirolimus, sclerotherapy, surgical resection. Regression of bleeding perianal lesions with a single session Nd:YAG laser under general anesthesia. PIK3CA or MEK inhibitor treatment is planned after genomic analysis.

MEDICAL DEPARTMENTS

DERMATOLOGY VADISTANBUL

Dermal, hair, nail, oral and genital mucosa diseases in all age groups are diagnosed and treated and all procedures related to dermatological diseases, skin cancers, and medical aesthetic are performed in the Dermatology Clinic of Liv Hospital Ulus.

PERSONALIZED TREATMENT

All kinds of dermatological diseases, especially skin cancer, eczema, psoriasis, skin related bacteria-fungus-viral infection diseases, all kinds of skin blemishes, hair, nail, mucosa diseases, are diagnosed and treated. Personalized recommendations and treatments are provided towards skin preservation and keeping it healthy and young. Treatments without surgery are provided in various aesthetic and cosmetic fields such as skin aging, wrinkles, prolapse, volume loss, marks, blemishes, capillary vessel.

CASE - 1

Xanthelasma: 57-year old female patient presented for gradually growing yellow spot on her eyelids. After the local Anesthesia administration, xanthelasmas were ablated with CO2 laser device.



CASE - 3

Rhinophyma: 75-year old male patient was followed up with rosacea diagnosis for a long time in another institution. He presented to our clinic with complaints of extreme redness and its growing on his nose, coarsening of the skin. The appearance on the patient's nose was repaired with 2 sessions of CO2 Fractional Laser.



CASE - 2

Acne Scar Treatment: 22-year old female patient presented for the hole scars on her face left behind the acne treatment. After the topical anesthesia administration, scars were repaired to a large extent with the 6 sessions of fractional laser application.



CASE - 4

After the first debridement of the patient, who was admitted with a diagnosis of diabetic foot, was performed by cardiovascular surgery, it was found that patient had necrobiotic panniculitis when he was consulted by us. Repeated laser wound care and PRF applications were performed. Deep wound healed quickly, the patient, whose tissue defect was filled, completely recovered after plastic surgery.



MEDICAL DEPARTMENTS

INFECTIOUS DISEASES AND CLINICAL MICROBIOLOGY ULUS

Liv Hospital Ulus Infectious Diseases Clinic mainly provides consultation services. Pre-operative evaluation prior to prosthesis surgery, especially approach to febrile patients, follow-up and treatment of complicated urinary system infections, sexually transmitted diseases and soft tissue disorders, influenza, viral infections are carried out in the clinic.

Controls are made at regular intervals

Infectioc Control Committee gathers within the scope of the hospital infection control plan at regular intervals. An infection control nurse serves in the unit. In-service training is provided by infection control team during the year at regular intervals and studies are carried out to increase compliance with infection control precautions.

All necessary precautions are taken

Within the scope of the infection control precautions, isolation precautions are also taken for inpatients when necessary. Due to the ongoing pandemic in our country and in the world, studies are carried out based on national and international guidelines in order to take necessary precautions for the emergency department and clinical patients, make the informations and ensure compliance with the rules.

Daily active, prospective surveillance is performed to monitor infections. The recorded data is compared with national and international data.

"Rough infection rate in our hospital was determined as 0.3 % and surgical site rate was determined as 0.3 % in 2021. Infection rates in our hospital, where major surgical interventions are performed, are below international standards and the target values."

"Internal and external quality controls are carried out on a regular basis and recorded. Number of approved microbiological tests in 2021 is above 20,000."



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- **Assoc. Prof.Dr. Zehra Çağla Karakoç.** Which Mask is More Effective? N95 or Surgical Mask? Status of Controversial Topics in the 1st Year of COVID-19 (Web Conference 70) Symposium - 6 April 2021.
- **Assoc. Prof.Dr. Zehra Çağla Karakoç.** Herpes Zoster and HPV Vaccines Questions and Answers. BUHASDER 24-28 April 2021, Antalya, Speaker
- **Inf. Nurse Yeşim Koçak Eriç** - Pediatric Hematology Oncology Care Course, Evidence Based Catheter Maintenance in Pediatric Oncology Patients Işinye University & Liv Hospital, 29.09.2021 - Speaker

MEDICAL DEPARTMENTS

INFECTIOUS DISEASES AND CLINICAL MICROBIOLOGY VADISTANBUL

In Liv Hospital Vadistanbul Infectious Diseases Clinic, studies are carried out for the examination and treatment of all diseases caused by microorganisms, in line with professional knowledge and experience and by observing evidence-based guidelines.

Patient profile treated and followed up in 2021:

- HIV infection
- Bacterial pneumonia in HIV-infected patients
- Resistant bacterial infections (circulatory, respiratory, blood, urine)
- Resistant fungal infections (Respiratory)
- Diffuse abscess in the body and spine infection
- COVID
- Mucormycosis growth after COVID (Black fungus)
- Infectious mononucleosis
- Hepatitis B and C
- Other sexually transmitted diseases
- Serious infections after animal bites



CLINICAL MICROBIOLOGY LABORATORY

In addition to bacteriological tests, rapid antigen tests and multiplex PCR tests for respiratory tract agents are performed in the Clinical Microbiology Laboratory.

The production and separation of microorganisms from the tests that make up the bacteriological tests are carried out in accordance with laboratory quality standards; and their identification and antimicrobial susceptibility tests in accordance with EAUCAST standards, with an automated system.

The results are given in as little as 1 hour with approximately 15 different rapid test kits to investigate the factors of different clinical pictures.

The respiratory tract infection agents are investigated by standardized, closed system multiplex PCR method. It has been made possible to distinguish between RSV and cold virus or influenza virus from various respiratory tract causative viruses that are indistinguishable from each other under pandemic conditions.



INFECTION CONTROL COMMITTEE

Infection Control Committee works according to the plan towards hospital infection control and by gathering on a regular basis. In-service training is given at regular intervals throughout the year, and studies are being done to increase compliance with infection control measures. Daily active, prospective surveillance is performed to monitor infections. The recorded data is compared with national and international data. "Rough infection rate in our hospital was determined as 0.2 % and no surgical site infection was observed. Infection rates in our hospital where major surgical interventions are performed, are below international standards and the target value."



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Dilek Arman

- Social Norms and Antibiotic Use, Speaker, Opening Conference, 9th EKMUD Scientific Platform of Turkey, 20-23 May 2021
- Why is Vaccine Necessary? Guest Speaker, Institute of Lawyers Physicians Health Law Panel IV: Pandemic, Vaccine and Law, 10 November 2021
- Bundle Applications and Importance in Hospital Infection Control. Session Moderator, Hospital Infections Congress 2021, Ankara 16-19 December 2021
- Frequently Asked Questions about COVID 19 Vaccination, Pegasus Training Academy, 7 August 2021 (Online)
- COVID News & Adult Immunization, PRO-NET, 7 September 2021 (Online)
- COVID-19: Frequently Asked Questions about Vaccines, NUROL Holding, 2 November 2021 (Online)

MEDICAL DEPARTMENTS

ENDOCRINOLOGY AND METABOLIC DISEASES ULUS

The team in Liv Hospital Ulus Endocrinology and Metabolic Diseases Clinic consists of physician, dietitian and diabetes nurses.

Diseases Treated our Clinic

- Pituitary Diseases
- Thyroid diseases
- Diabetes
- Obesity and Metabolic Syndrome:
- Suprarenal gland and gonad diseases:
- Osteoporosis



There is no need to puncture your finger anymore for diabetes monitoring

Diabetes monitoring is easier with Freestyle libre, which is a continuous blood glucose monitoring system. Your blood glucose can be easily measured with the help of a small sensor and a reader, which can be simply applied to the upper back of your arm. With the help of the sensor, which is changed every 14 days, blood glucose values can be displayed painlessly without finger puncturing, weekly or monthly glucose data can be shared with the physician during the examination or via remote connection. Diabetes monitoring is easier with Freestyle libre, which is a continuous blood glucose monitoring system. Your blood glucose can be easily measured with the help of a small sensor and a reader, which can be simply applied to the upper back of your arm. With the help of the sensor, which is changed every 14 days, blood glucose values can be displayed painlessly without finger puncturing, weekly or monthly glucose data can be shared with the physician during the examination or via remote connection.

DIABETIC FOOT TEAM

In our hospital, diabetic patients are followed by a team of experienced endocrinologists, dietitians and diabetes nurses, and patients are given diabetes education. In our outpatient clinic, technological treatment and follow-up systems such as insulin pump and continuous blood glucose monitoring are applied. With regard to complications related to diabetes such as eye problems (retinopathy), nerve damage (neuropathy), we work in cooperation with an ophthalmologist and neurologist, who are also experienced physicians. Diabetic foot wounds, which are an important complication and can cause limb loss if not treated quickly, are promptly examined and treated by the "Diabetic Foot Team", which was formed for this purpose and includes specialist doctors from units closely related to the subject.

THYROID TEAM

Liv Thyroid Team provides services throughout the diagnosis, treatment and follow-up periods of thyroid diseases. Thyroid Department is a department that requires correlation with Departments of Endocrinology and Metabolism, Endocrine Surgery, Radiology, Pathology, Nuclear Medicine, Ophthalmology (Eye Health), Otorhinolaryngology. Following the completion of first examination and tests of the patients by Thyroid Team which has a common working principles, the Team plans a treatment pursuant to the scientific approaches accepted all over the world today.

THYROIDOLOGY COUNCIL

The Thyroidology Council, which brings together physicians from all relevant departments, determines the type of treatment with a multidisciplinary perspective in difficult cases.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Assoc.Prof. Dr. Demet Özgül Yetkin

- Spokesperson - Use of Flash Glucose Measurement System and Patient Follow-up 28.05.2021
- Online conferences to raise awareness on world diabetes day, world thyroid day and osteoporosis day

MEDICAL DEPARTMENTS

ENDOCRINOLOGY AND METABOLIC DISEASES VADISTANBUL

Many patients with different diseases that fall within the field of endocrinology have been examined and treated at Liv Hospital Vadistanbul Endocrinology and Metabolic Diseases Clinic.

PITUITARY CENTER

Endocrinology and Metabolic Diseases Clinic takes an active role in the diagnosis, follow-up and treatment of patients for pituitary diseases in the Pituitary Center established under the leadership of neurosurgery department.

ENDOCRINOLOGY COUNCIL

Endocrinology and Metabolic Diseases Clinic has established, and now ensures regular congregation of the Endocrine Council, which consists of General Surgery, Pathology, Nuclear Medicine, Pediatric Endocrinology, Radiology Clinics.

DIABETIC FOOT COUNCIL

Regular meetings are held in the Diabetic Foot Council, which has been established by Endocrinology and Metabolic Diseases Clinic together with the Cardiovascular Surgery, Orthopedics, Radiology, Dermatology, Algology, Neurology, and Stem Cell departments.

The clinic supports the obesity center with nurses trained in the fields of obesity/diabetes and endocrine.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Kubilay Ükinç

- Drug-Associated Diabetes and Its Management, 57th National Diabetes Congress, Antalya
- Co-Formulation in Diabetes Treatment, 3. Clinical Endocrinology and Diabetes Association, Sarıyerme
- Incretin-Based Therapies: Exenatide, 3. Clinical Endocrinology and Diabetes Association, Sarıyerme
- Obesity 2021: From the View of the Endocrinologist, Gastro Academy, Cyprus
- Role of SGLT2s in Diabetes Treatment, Spec. Dr. Training Meeting, Istanbul
- Cases in the Treatment of Type 2 Diabetes, and Oad Treatment and Metformin in Family Medicine, AheK Plus, Online
- Role of Dpp 4 Inhibitors in Diabetes Treatment, Spec. Dr. Training Meeting, Istanbul
- Diabetic Neuropathy and Its Treatment, Spec. Dr. Training Meeting, Istanbul
- Role of Dpp 4 Inhibitors in Dm Treatment. International Consultation Meeting, International Expert Meeting, Online
- Current Overview Of The Patient With Diabetes, European Cardiac Care & Hypertension Symposium, Kiev
- Kvs Protection in Type 2 Dm Treatment: Empagliflozin, Spec. Dr. Training Meeting, Istanbul
- Endocrine Course Coordinatorship 23rd National Internal Medicine Congress
- Bermuda Triangle: Type 2 Diabetes, Heart Failure, and Nephropathy, 23rd National Internal Medicine Congress,
- Current Overview of Obesity and Its Complications: Cardiovascular, 23rd National Internal Medicine Congress, Cyprus
- Conversations on Vital Protection, 23rd National Internal Medicine Congress, Cyprus
- Expected-Included Therapy in Diabetic Peripheral Neuropathy, 23rd National Internal Medicine Congress, Cyprus
- Basal Insulins in Diabetes Treatment: Detemir Insulin, Spec. Dr. Training Meeting, Istanbul
- Current Approaches in Diabetes., 8th National Istahed Family Medicine Congress
- Diabetes with Cases, 8th National Istahed Family Medicine Congress
- Diabetes, Hypertension And Dyslipidemia, European Cardiac Care & Hypertension Symposium, Belgrade
- Current Treatment of Diabetes Mellitus, 38th National Gastroenterology Week
- Diabetes 1.0 Diabetic & Diabetes 2.0 Cardiac, University of Healthcare Sciences 4th Internal Medicine Congress
- Brainstorm On Diabetes, Hypertension And Dyslipidemia, 7th International Emergency Medicine And Internal Medicine Congress
- Diabetes Treatment 3.0, Online Family Medicine Meeting
- Hyperlipidemia, and Its Treatment, Online Family Medicine Meeting

MEDICAL DEPARTMENTS

PHYSICAL THERAPY AND REHABILITATION ULUS

Liv Hospital Ulus Physical Therapy and Rehabilitation Department provides services with its clinic, rehabilitation unit and electrotherapy treatment units. After the detailed examination of the patient, who applied for physical therapy or was referred from other departments, is carried out by a physical therapy and rehabilitation specialist, a treatment plan is designed for the patient. These treatments include various physical therapy applications, exercise therapies, injection therapies, drug therapies or manual therapies.

Treatment Department Electrotherapy Units

- Cybex
- Traction
- ESWT
- Magnetic seat
- Magnetic field treatment
- Hydrotherapy
- TENS
- Ultrasound
- Shortwave
- Laser
- Galvanic and diadynamic currents
- Electric muscle stimulation



Rehabilitation Of Rheumatic Diseases

- Fibromyalgia, myofascial pain syndromes
- Arthrosis (calcification)
- Ankylosing spondylitis
- Rehabilitation for chronic rheumatoid arthritis deformity, etc.

Pediatric Rehabilitation

- Cerebral Palsy (CP)
- Torticollis
- Erb - Duchenne palsy
- Dushen dystrophy
- Congenital deformity etc.

Women's Health and Rehabilitation

- Pelvic pain before and after birth
- Posture analysis and exercise training for pregnant women
- Urinary incontinence (stress, urg incontinence)
- Dysmenorrhoea
- Vaginismus
- Dyspareunia
- Other diseases associated with pelvic floor muscle weakness
- Hip and back pain during pregnancy (piriformis syndrome, coxodynia, lumbar, hyperlordosis)
- Hyperemesis gravidarum (reduction of vomiting, especially in the first three months)

Post Plastic Surgery Rehabilitation

- Burn rehabilitation
- Excessive weakness after botox application
- Increasing blood supply after flap application
- Pain relief after cosmetic surgery
- Contracture

Rehabilitation of Sports Injuries

- Upper back, Lower back and Neck Pains
- Muscle, tendon injuries
- Strain or sprain in ligaments and joints
- After Fracture rehabilitation
- Measuring and rehabilitation of muscle shortness, weakness and condition

Neurological Rehabilitation

It is performed for the recovery of balance, ambulation, daily living activities, muscle strength and function losses in patients.

- Spinal Cord Injuries
- Brain damage
- CP
- MS
- Stroke
- ALS
- Parkinson's
- Facial paralysis
- Myopathy
- Tension type headache
- Chronic lower back pain



Rehabilitation After Orthopedic Surgery

- Spine Surgery
- Total knee, hip, elbow and shoulder prosthesis operations
- Shoulder rotator cuff repair operation
- ACL reconstruction operation
- Arthroscopic knee operation such as meniscectomy
- Arthroscopic hip impingement operations
- Achilles tendon repair
- Nerve entrapment op. (CTS, TTS, Cubital tunnel syndromes)
- Tendon, nerve lesion and repair of extremities
- Fracture rehabilitation
- Sudack atrophy (RSD)
- Dull shoulder
- Patellar chondro malacia

Other treatments

- Neurological rehabilitation after root cell application
- Lymphodema treatment
- Osteoporosis
- Tempromandibular joint dysfunction, contracture
- Vertigo and tinnitus (due to cervical lordosis or spondylosis)
- Application of ESWT in epin calcanei epicondylitis
- Posture analysis
- Magnetic seat for urinary incontinence problems (Extracorporeal Magnetic Innervation)

MEDICAL DEPARTMENTS

PHYSICAL THERAPY AND REHABILITATION VADISTANBUL

SPECIFIC TREATMENT FIELDS

Schroth Method in Scoliosis Treatment: The Schroth method, which is one of the most effective treatment methods for those who have been diagnosed with spinal curvature and does not require surgical treatment, and is applied in very few clinics, is performed by certified physiotherapists. Apart from the patients who do not require surgical treatment, it is also used to reduce the angle of scoliosis before and after surgery.

Lymphedema Rehabilitation: Physiotherapists specialized in this field are required for the rehabilitation of lymphedema, which can develop especially after cancer and cancer treatments. Manual lymph drainage, self-administered massage that was taught to patients, compression sleeves, lymphedema bandaging, compression and complex decongestive physical therapy exercises are important parts of this treatment.



OSTOEPATHY AND MANUAL THERAPY APPLICATIONS

We start with facial therapy in muscle spasms, waist-neck-back pain, chronic fatigue, postural disorders, hernias and tension-type headaches. We aim to relax the fascia first and then relax the muscles and their surroundings. Osteopathy, parietal and visceral applications and all body components of the person are evaluated together as a more holistic manual therapy application. In manual therapy, patients are offered a more inclusive manual therapy opportunity with applications such as graston applications, massage gun, trigger point massage.



PEDIATRIC REHABILITATION

In our clinic, while the treatment and rehabilitation of neurological patients such as cerebral palsy, mental motor retardation, spina bifida, brachial plexus injuries, toticollis, muscular dystrophy, traumatic brain injury or spinal cord palsy are performed, pediatric patients such as posture disorders, Achilles shortness, flat feet, toe walking and scoliosis are being treated. Orthopedic rehabilitation is also applied in cases.



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Berna Tander

- Current Approach to the Axilla in a Patient with Breast Cancer / Diagnosis and Treatment of Lymphedema - 25.09.2021
- Posture Disorders / 24.11.2021

Specialist Physiotherapist Övünç Güçlüer - How to Prevent Lymphedema? - Post-Covid Rehabilitation / 10.8.2021

MEDICAL DEPARTMENTS

GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION CLINIC ULUS

At Liv Hospital Ulus Gastroenterology and Hepatology Clinic, patient comfort is prioritized for endoscopic examination and procedures. Many procedures are performed in the endoscopy unit for diagnosis, treatment and follow-up.



Services Provided in the Endoscopy Unit

- Upper and Lower Gastrointestinal System Endoscopy (Gastroscopy, Colonoscopy)
- Endoscopic Ultrasonography (EUS)
- Endoscopic Retrograde Cholangiopancreatography (ERCP)
- Video Capsule Endoscopy
- Double Balloon Endoscopy
- Impedance pH Meter, Capsule pH Meter
- Esophageal Manometry
- Anal Manometry
- Fibroscan

Endoscopic Procedures

- Endoscopic polypectomies
- Endoscopic Mucosal Resection (EMR)
- Endoscopic Submucosal Dissection (ESD)
- Peroral Endoscopic Myotomy (POEM)
- Endoscopic Resection with Submucosal Tunnel technique (STER)
- Anti Reflux Mucosectomy (ARM)
- Gastric Peroral Endoscopic Myotomy (G-POEM)
- Hybrid (Endoscopic+surgery) endo-laparoscopic surgery
- Treatment of Esophageal Strictures with Endoscopic Laser
- Diagnosis and sampling of gastric and intestinal lesions with EUS
- Pancreas and lymph node sampling with EUS (Fine needle)
- EUS-guided pancreatic cyst evacuation and cystosectomies
- Balloon, bougie and stent applications in gastrointestinal tract strictures
- Removal of bile duct stones with ERCP, placement of stent in the bile ducts
- Band ligation and cyanoacrylate application in esophageal varices bleeding
- Endoscopic slimming balloon placement
- Percutaneous endoscopic gastrostomy (PEG)

CASE - 1

A 73-year-old male patient with a 4 cm polyp in the large intestine underwent endoscopic submucosal dissection without surgery. (ESD) method and the removed area was closed endoscopically.



MEDICAL DEPARTMENTS

GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION CLINIC ULUS

CASE - 2

33-year-old female patient had her dysphagia that developed due to Achalasia corrected without surgery by loosening the lower end of the esophagus with Endoscopic Peroral Myotomy (POEM) method.



CASE - 3

The tumor in the stomach was removed by gastroenterology and general surgery doctors without a major surgery with hybrid endo-laparoscopic surgery method and the patient regained their health.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Binnur Şimşek

- Importance of Female Gender in Viral Hepatitis Etiology, Treatment and Follow-up Differences, 08 March
- Effects of Aging on Liver Microcirculation and Sinusoidal Structures - 13th National Hepatology Congress, 28-30 May
- Vascular Liver Diseases - 20th Çapa Gastroenteropathology Days, 10-12 June, Istanbul
- Endoscopic Submucosal Dissection Indications in Colon Polyps, 22 October - International Endo Academy Course, Baku
- Common Mistakes in Dyspepsia and Treatment Recommendations - 38th National Gastroenterology Week, 16-20 November, Antalya

Prof. Dr. Erdem Akbal

- ESD-EMR School, Hybrid ESD-EMR in Gastric Lesions, Society of Gastrointestinal Endoscopy, 4 March
- 4th Baku Endoscopic Forum, ESD Applications and endoscopic submucosal dissection and endoscopic full dissection in Colorectal Polyps, 7 May
- 17th National Hepatogastroenterology Congress, Congress Secretary, Artificial Intelligence in Colon Polyp Screening, 17-19 June - 14.Eastern South East Anatolia Hepato Gastroenterology Days, Artificial Intelligence in Endoscopy, 10-12 September
- University of Healthcare Sciences 5. Gastroenterology Days, ESD application, Ankara City Hospital, Ankara, 24-25 September
- 6th Gastrointestinal Endoscopy Days, POEM Application, Ümraniye Training and Research Hospital, Istanbul, 7-8 October
- International Endo Academy, Baku, ESD applications, ESD applications, hands on ESD training, 22-23 October
- International Endo Academy, Kazakhstan, ESD Applications, ESD principles, 5-7 November
- 38th National Gastroenterology Week, 16-21 November, Antalya, Underwater EMR/ESD
- Prof. Dr. Erdem Akbal, Prof. Dr. Binnur Şimşek Effect of thermal compensation on diagnosis and parameters in high resolution esophageal manometry examination. 38th National Gastroenterology Week, 16-20 November, Antalya

Dr. Lect. Asst. Ekrem Aslan

- Chromoendoscopy, International Endo Academy, Baku, 22-23 October
- High resolution esophageal motility with cases, International Endo Academy, Baku, 22-23 October

MEDICAL DEPARTMENTS

GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION CLINIC VADISTANBUL

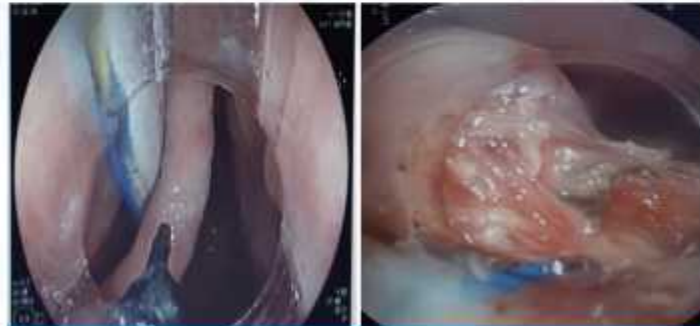
Liv Hospital Vadistanbul Gastroenterology and Hepatology Clinic has an esophagus and anal manometry laboratory for detailed diagnosis of functional bowel diseases, anorectal region diseases and functional diseases of the esophagus.

Procedures performed in the clinic in 2021

- Endoscopy and colonoscopy
- Advanced endoscopic applications for therapeutic purposes
- Colonoscopic stent placement in a patient with intestinal obstruction due to colon tumor
- Stone removal and stenting with ERCP procedure due to gallstones and pancreatic tumors,
- Endoscopic mucosal resection and endoscopic submucosal dissection procedures in early stage colon tumor cases,
- Double balloon enteroscopy was performed on the patient until the cause of bleeding at the level of the small intestine was investigated
- Esophageal manometry examination for dysphagia
- Anal manometry procedures for the differential diagnosis of constipation,
- Endoscopic balloon placement in the stomach for obesity treatment
- Endoscopic ultrasonography procedure for differential diagnosis of pancreatic mass and diseases involving the deep layer of the stomach
- PEG procedures and endoscopic treatment of Zenker's diverticulum



CASE - 1



Treatment of Zenker's diverticulum (Clutch cutter)

CASE - 2



Pancreatic stent and ERCP application

CASE - 3



Endoscopic submucosal dissection procedure-early stage colon tumor

MEDICAL DEPARTMENTS

GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION CLINIC VADISTANBUL

CASE - 4



Gastric balloon application

CASE - 5



Early stage gastric cancer treatment-Endoscopic submucosal dissection

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Erdem Koçak

- 17. National Hepato Gastroenterology Congress -Interventional Endoscopy Method under Anticoagulants and Antiaggregants - Speaker
- Diagnosis and Treatment Methods in Pancreatic Cancer/ Regional Symposium/Canakkale - Speaker %
- 38. National Gastroenterology Congress - Endoscopic Treatment Methods for Polyps Smaller than 20 mm - Cold Snare, Hot Snare, EMR- Speaker

Doç. Dr. Eylem Karatay

- Inflammatory Bowel Diseases - Speaker 2-4 September
- 17. National Hepatogastroenterology Congress - Endoscopic Treatment Methods for Polyps Smaller than 20 mm - Speaker
- 38 National Congress of Gastroenterology - Endoscopy Management of Bariatric Surgery Complications / Interactive Gastroenterology Council - Speaker
- Inflammatory Bowel Diseases School - Master Apprentice Relationship in Inflammatory Bowel Diseases - Speaker



MEDICAL DEPARTMENTS

GENERAL SURGERY ULUS

In Liv Hospital Ulus General Surgery Clinic, surgeries are performed using the most advanced technological methods in the fields of gastrointestinal surgery, breast diseases, endocrine surgery diseases, hepatobiliary surgery, hernia surgery and oncological surgery.

COLORECTAL SURGERY AND PROCTOLOGY

Patients with colon cancer and rectal cancer are evaluated at multidisciplinary tumor council, and are operated with the minimal complication with robotic and laparoscopic methods. In proctology, laser treatment and non-surgical anal botox treatments are applied in anal fissure, hemorrhoidal disease, perianal fistula and cyst dermoid sacral.

CYTOREDUCTIVE SURGERY + HIPEC



In cases of severe intra-abdominal metastatic tumors (Miyor, ide, colon, ovary, appendix, pseudomyxoma peritonei), cytoreductive surgery is used to increase the life expectancy and quality of the patient.

LAPAROSCOPIC HERNIA REPAIR

Surgeries of difficult and recurrent abdominal wall, groin and incisional hernia are performed with laparoscopic and robotic methods together by using high technology and equipment (3D mesh, Capsure® etc.)

BREAST SURGERY

Patients are guided accurately with mammography, ultrasonography, MR imaging devices and tru-cut biopsy with the latest technology in breast health screenings. Reconstruction surgeries are performed together with breast conserving surgery or plastic surgery. With the cooperation of radiology and nuclear medicine, non-palpable lesions such as ROLL can be removed with clean surgical margins. Patients are evaluated at multidisciplinary tumor council and their treatment protocols are determined accordingly.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- Surg. Dr. Bahar Canbay - Cytoreductive Surgery and Hot Chemotherapy, 11th National Haseki Medical Congress, 2-5th September 2021
- 'Does Use of IONM Reduce Postoperative Hypoparathyroidism?' Şeref Erdoğan, Bahar Canbay Torun, Buse Yıldırım, Muzaffer Akinci, 19th Medical Surgery Endocrinology Post-Graduation Training Course, 1-3rd October 2021
- 'Laparoscopic Sleeve Gastrectomy In A Morbid Obese Patient With Partial Situs Inversus' Bahar Canbay Torun, Aykhan Abbasov, Halil Coskun, National Endoscopic Laparoscopic Surgery Congress, 28-31st October 2021
- 'Laparoscopic And Endoscopic Hybrid Gastric Wedge Resection For Gastrointestinal Stromal Tumor' Bahar Canbay Torun, Erdem Akbal, Hakan Teoman Yanar, 15th National Endoscopic Laparoscopic Surgery Congress 28-31st October 2021
- 'Laparoscopic Approach In Hydatid Cyst Of The Liver: Cystotomy, Drainage And Segmentectomy Due To Atrophy' Bahar Canbay Torun, Kemal Dolay, 15th National Endoscopic Laparoscopic Surgery Congress, 28-31st October 2021

ENDOCRINE SURGERY ULUS - VADİSTANBUL



In order to certify the compliance of Endocrine Surgery services (All polyclinic and surgical applications for benign masses and cancers of the thyroid, parathyroid, adrenal glands, and other intra-abdominal neuroendocrine glands that require surgery) with international quality standards, our hospital has been accepted as of December 2021 as a member of the EUROCRINE® Quality Record Database System, which is an EU Health Program project under the European Society of Endocrine Surgeons (ESES) operating within the European Union and countries with close relations, by meeting all the application conditions.

MEDICAL DEPARTMENTS

GENERAL SURGERY VADİSTANBUL

Services provided by General Surgery Clinic;

- Colorectal Surgery Clinic (Colon and Rectum Diseases and Cancer, Proctology)
- Upper Gastrointestinal System Diseases (such as Gastric Cancer, Gastroesophageal Reflux)
- Breast Health Center
- Hepato-Pancreato-Biliary Surgery
- Endocrine Surgery Clinic
- Obesity and Metabolic Diseases Surgery
- Common Surgical Diseases (Gallbladder Stone, Inguinal Hernia and Abdominal Wall Hernia)

CASE : POLYPOSIS

In the follow-up of the patient who was operated with the diagnosis of early stage endometrial tumor 8 years ago, polyposis syndrome was detected in the colonoscopy performed due to hematochezia. Genetic analysis revealed biallelic MUTYH gene defect, and Lynch Syndrome gene defect of uncertain significance. After having the patient's rectal polyp load cleared with ESD, laparoscopic total abdominal colectomy operation was performed.



BREAST SURGERY

In the Breast Health Center; all kinds of procedures from breast screening to advanced biopsy techniques are performed with the latest technology radiologic imaging systems under one roof by academicians specialized in breast diseases and health. Breast Health Team, composed of different branches, decides for the most appropriate treatment. Breast Health Team consisting of breast-specific radiology, pathology, nuclear medicine, breast surgery, plastic and reconstructive surgery, medical oncology, radiation oncology, physical therapy, genetics departments organized 30 meetings in 2020.

HEPATOPANCREATOBILIARY SURGERY

Hepatopancreaticobiliary Surgery Clinic uses modern methods (laparoscopic and robotic) in the light of current diagnosis and treatments for liver, biliary tract and pancreatic cancer and benign diseases.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Koray Karabulut

- 15th National 2nd International Congress of Endoscopic Laparoscopic Surgery - Congress Secretary
- European Congress of Laparoscopic Surgery (EAES), Barcelona - Contributor

Assoc. Prof. Dr. Emre Sivriköz

- National Coloproctology & Stoma Therapy Congress, 8-10 October 2021 - Hereditary Non-Polyposis Colorectal Cancers
- 15th National & 2nd International Congress of Endoscopic Laparoscopic Surgery, 28-31 October 2021 - Approach to Transverse Colon Tumors / Course: Hemorrhoidal Artery Ligation with Recto-anal Repair (HAL-RAR)
- 18th Turkish Society of Colon and Rectal Surgery Congress, 29 November-4 December 2021, Rectum Cancer - Round Table Session with Cases

Assoc. Prof. Dr. Mustafa Tükenmez

- MedicalPark Breast Cancer Symposium 19 June 2021, Speaker - How Should the Primary Tumor and Axilla Be Approached in Breast Cancer?
- Marmara Society of Oncology Breast Symposium 7 February 2021 Speaker - Bilateral Risk Reducing Mastectomy or Follow-up in BRCA Mutant Cases?
- Liv Hospital Vadistanbul Current Approach to Axilla in Patients with Breast Cancer - Future of Axilla Surgery in Breast Cancer- Speaker. 25 September 2021

MEDICAL DEPARTMENTS

GENERAL INTENSIVE CARE ULUS

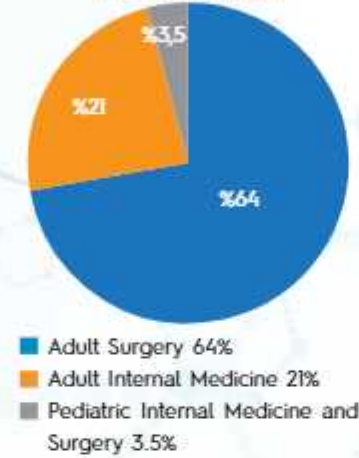
In Liv Hospital Ulus General Intensive Care Unit, clinical activities are evaluated monthly and the data obtained are compared with the results in the literature of the world and our country. The results of these evaluations also show that we are able to reach our goals every month.

ADULT INTENSIVE CARE PATIENTS

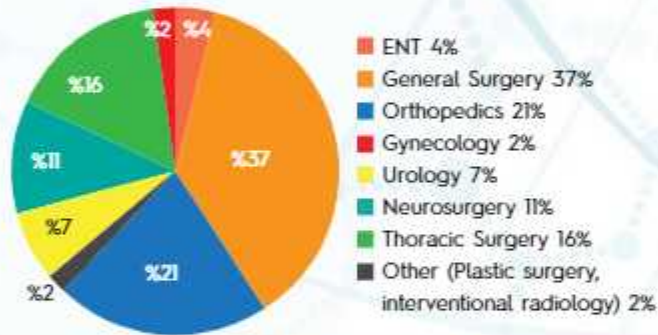
Mortality risks of patients (Average age is 73.5 years) that requires adult intensive care were evaluated with APACHE II score. Our patients had been followed up in intensive care unit at average of 10.6 days. Expected mortality was 29% and real was 6.8% according to Average APACHE II SCORE (18.43)

One of the most important parameters on evaluation of intensive care positive clinic outcome is standard mortality rate. The standard mortality rate is aimed to be below 1. This rate is 0.2 in Liv Hospital Vadistanbul Intensive Care Unit.

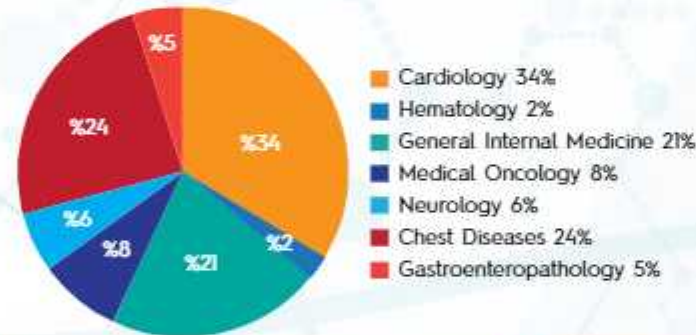
INTENSIVE CARE PATIENT DISTRIBUTION



SURGICAL PATIENT DISTRIBUTION



INTERNAL MEDICINE PATIENT DISTRIBUTION



Applied courses of Istinye University students of Faculty of Medicine



Life support is provided with VV-ECMO device, when necessary, to the patients with severe respiratory failure due to Covid 19 pneumonia.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Simru Tuğrul

- Turkish Neurosurgery Society, Basic Neurosurgery Courses term 5, 2nd Course (01.11.2021-20.12.2021)- Intensive Care Management in Acute Head Trauma
- Turkish Intensive Care Society, Mechanical Ventilation Course; Mechanical Ventilation at Home, Recruitment Maneuvers, Time Constant, Compliance, Elastance, PEEPi, P0.1
- 23th International Intensive Care Symposium - Moderator



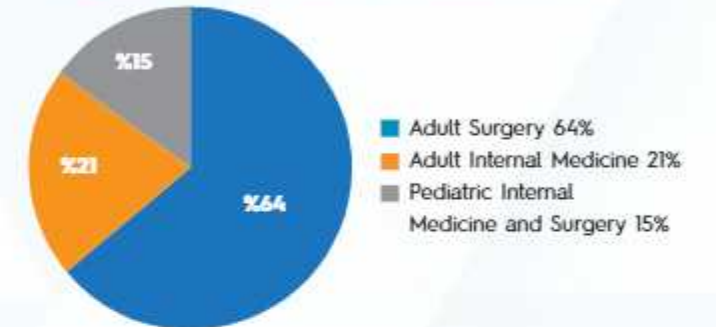
MEDICAL DEPARTMENTS

GENERAL INTENSIVE CARE VADISTANBUL

Liv Hospital General Intensive Care Unit; provides multidisciplinary, patient-oriented, qualified and reliable healthcare service with its expert physician staff and specialists of other branches.



INTENSIVE CARE PATIENT DISTRIBUTION



PEDIATRIC INTENSIVE CARE PATIENTS

58% of the patients that requires Pediatric Intensive Care are followed after major surgery. (Average age 7.5 years) Mortality risks of Pediatric patients are evaluated with PRISM score. "Expected mortality was 6.03% and real was 0% according to Average PRISM SCORE (5.10)" Our patients had been followed up in intensive care unit at average of 3.7 days.

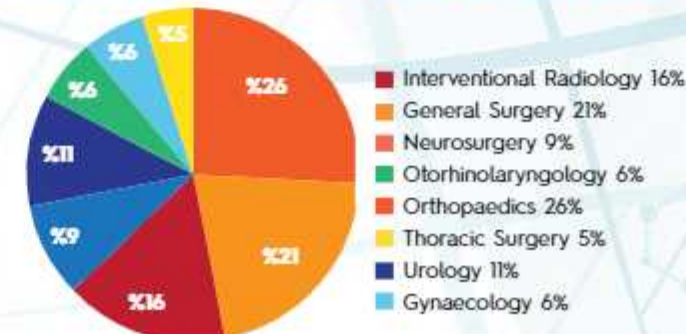
ADULT INTENSIVE CARE PATIENTS

Mortality risks of patients (Average age is 59 years) that requires adult intensive care were evaluated with APACHE II score. Our patients had been followed up in intensive care unit at average of 2.7 days.

Expected mortality was 24% and real was 9% according to Average APACHE II SCORE (13.7)

One of the most important parameters on evaluation of intensive care positive clinic outcome is standard mortality rate. The standard mortality rate is aimed to be below 1. This rate is 0.3 in Liv Hospital Vadistanbul Intensive Care Unit.

SURGICAL INTENSIVE CARE PATIENT DISTRIBUTION



MEDICAL DEPARTMENTS

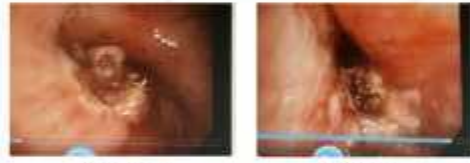
CHEST DISEASES ULUS

Service with comprehensive, technological and personalized approach is provided in the Liv Hospital Ulus Chest Diseases Clinic. Diagnosis and treatment of all lung diseases, especially Covid-19, lung cancer, asthma, COPD, pulmonary embolism, are carried out. Counseling is provided on ways to quit smoking and allergy prevention.

Bronchoscopy Unit: Patient comfort comes first in fiberoptic diagnostic bronchoscopy deep sedation in the Bronchoscopy Unit, which has both diagnostic and therapeutic bronchoscopy facilities. Invasive procedures, such as EBUS, Argon Plasma Coagulation, stent application, electrocautery, mucus clearing in COPD and valve applications are performed in the operating room, under general anesthesia, to ensure patient comfort.

CASE

Upper left lobe bronchial opening could be achieved as a result of use of Argon plasma coagulation in the patient who had lung tumor that occluded the upper left lobe bronchus.



APC öncesi
Sol üst lob bronşunu tıkayan tümör

APC sonrası
Havayolu açıklığı sağlandı

Respiratory Function Laboratory and Pulmonary Rehabilitation Unit: Spirometry, reversibility test, flow-volume curve, diffusion capacity, VO2 max measurement, 6 minute walking tests can be performed by experienced physiotherapists. Pulmonary Rehabilitation Program provides respiratory exercise and rehabilitation in a personalized manner in chronic lung diseases and post-operative patients.

Allergy Unit: In addition to skin prick tests, total and specific IgE in blood in diagnosis of allergic diseases, molecular allergic tests can now be performed in our hospital. These tests, which are studied from blood, can be carried up to 40 units as inhalant and food allergy panels. Vaccine (immunotherapy) is also applied at appropriate patient population after diagnosis. Products obtained from the allergens to which the patient is sensitive to are administered to the patient in ever increasing doses and at certain time intervals in this treatment. Vaccine treatment is usually applied to the body subcutaneously with the tip of a small needle. It is aimed to reach an appropriate dose that will not cause any problems for the patient with dose increasing. This way, it is aimed to render the person insensitive to the allergen administered.

Sleep Disorders Unit: Sleep tests (polysomnography, split-night test, titration test) are carried out under the supervision of a sleep technician that is experienced and specialized in their field. In the unit, where the patients are evaluated as multidisciplinary with Neurology and Otorhinolaryngology Clinics, various sleep disorders are diagnosed and treated.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

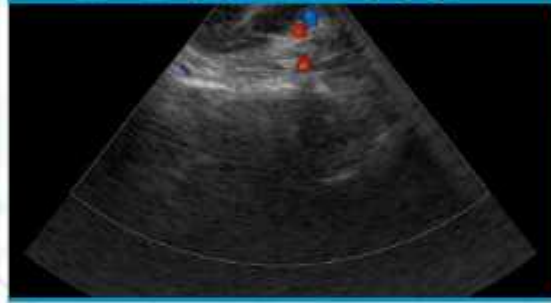
Prof. Dr. Ferah Ece

- Turkish Society of Lung Cancer Marmara Region Meetings Organizing Committee Member
- Academic Society of Respiration VII. Respiration School Trainer and Panelist



Interventional Procedures Performed in Our Clinic
FOB: %46 EBUS: %18 Thoracentesis: %31 Mucus Clearing: %5

Mediastinal lymph node biopsy by EBUS



MEDICAL DEPARTMENTS

CHEST DISEASES VADISTANBUL

In Liv Hospital Vadistanbul Pulmonary Diseases Clinic;

- Respiratory function tests, reversibility PFT, carbon monoxide diffusion test and diffusion capacity, total lung capacity and residual volume measurements are performed in our laboratory accompanied by a respiratory physiotherapist in our laboratory.
- Allergy skin prick test is applied for the diagnosis of allergic diseases and allergic asthma.
- Flexible video bronchoscopy and endobronchial ultrasonography (EBUS) procedures are performed for diagnosis and treatment in the bronchoscopy unit. Lung cancer staging is performed by lymphatic evaluation in the same session as ROSE (rapid on site evaluation).
- Respiratory physiotherapy and pulmonary rehabilitation procedures are performed in the outpatient and inpatient wards, accompanied by a respiratory physiotherapist. Noninvasive mechanical ventilation therapy and nasal high flow oxygen therapy are applied to patients with respiratory failure.
- In the treatment of patients with lung involvement due to Covid 19, mesenchymal stem cell therapy is applied alongside other auxiliary treatments.
- Polysomnography and CPAP titration test are performed in the presence of a sleep technician for the diagnosis and treatment of respiratory diseases at sleep.



CASE

55-year-old H.G., active smoker. He has diabetes for more than 20 years, angiography and 2 times coronary stent application due to coronary artery disease, and a history of renal transplantation in 2014. Therefore, he was using immunosuppressive drugs, multiple antihypertensive drugs, and insulin therapy for diabetes. The patient, who had 3 doses of Covid vaccine, was PCR positive and antibody negative when hospitalized due to respiratory distress, low saturation, high fever and pneumonia due to Covid 19. In addition to other medical treatments, the patient was treated with convalescent immune plasma therapy, antiviral remdesivir, tocilizumab therapy due to cytokine storm, HFNO and intermittent non-invasive mechanical ventilation therapy. Three doses of mesenchymal stem cell therapy were administered to the patient, who was followed up in the service conditions and whose treatments were arranged in line with the recommendations of nephrology, infectious diseases and endocrinology, and who had a high risk of intubation. After 14 days of medical treatment, he was discharged without the need for oxygen support and with full recovery.



Chest X-Rays before and after discharge



MEDICAL DEPARTMENTS

OPHTHALMOLOGY CLINIC ULUS

Speciality doctors in ophthalmology work according to different ophthalmological subspecialties.

CORNEA AND REFRACTIVE SURGERY (EXCIMER LASER)

70% of all surgical interventions consist of cornea-cataract-refractive surgeries.

Corneal transplantation, cataract surgery (while solving the problem of cataract, patients can get rid of their glasses with multifocal lenses), EDOF intraocular lenses, which can display further and medium visibility range, in patients which cannot wear multifocal intraocular lenses, are widely applied. Using wavefront femtosecond excimer laser, myopia up to number 8, astigmatism and hypermetropia up to number 6 can be corrected. Femtosecond laser can be used in keratoplasty cases as well.

RETINA SURGERY

It accounts for 20 % of all the surgeries performed. And 90 % of them consists of intraocular intravitreal injections. Vitreoretinal surgery can be completed much faster with 27 G trocar systems and using 10.000 cpm ocutomes.

GLAUCOMA

Congenital glaucoma surgery, goniotomy, trabeculotomy, seton surgery, diode laser surgery, selective laser trabeculoplasty are carried out.

CASE - 1

78-year-old male patient presented with complaints of severe pain, secretion, lacrimation and blurred vision in the right eye. Lateral tarsal strip surgery was applied for lower right eyelid entropion.



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- **Prof. Dr. Vedat Kaya**, Moderator, TOD 55th NATIONAL OPHTHALMOLOGY CONGRESS - KRC unit PRK course training
- **Prof. Dr. Vedat Kaya**, Speaker - New options in intraocular lenses, LIV Hospital Ulus
- **Assoc.Prof.Dr. Murat Uyar** - TOD VRC Unit Virtual Meeting - Surgical Indication, Timing and Technique in Vitreoretinal Interface Pathologies with Cases
- **Assoc.Prof.Dr. Murat Uyar** - TOD OTM Unit Virtual Meeting - Controversial Issues in Late Period Trauma Managing with Cases
- **Assoc.Prof.Dr. Murat Uyar** - TOD 55th NATIONAL OPHTHALMOLOGY CONGRESS - ANTALYA BILEP VRC-1 Problems and Solutions in Vitreoretinal Surgery: - Approaching Subretinal PFCL

OCULOPLASTY

Lower-upper eyelid surgeries, lacrimal duct obstruction treatments, orbita surgeries, evisceration-enucleation and prosthesis procedures are carried out.

STRABISMUS

Strabismus, especially seen in childhood, can be corrected by surgery as well as glasses and/or closure treatments.

CASE - 2

26-year-old female patient presented with complaint of post-traumatic cataract and aniridia (Pupil defect) in her right eye. Iris implant was placed together with cataract surgery.



MEDICAL DEPARTMENTS

OPHTHALMOLOGY CLINIC VADISTANBUL

Liv Hospital Vadistanbul Ophthalmology Clinic is technologically equipped at the highest level in today's conditions. OCT-Angiography device, optical biometry, topography, pachymetry, computerized visual field, contrast analyzer, which eliminates invasive intervention in the examination of retinal diseases, are among the devices available in the clinic. It cooperates with the Stem Cell Laboratory. Autologous serum applications and limbal stem cell applications are at the forefront in dry eye patients and corneal injuries. PRP and fibroblast injection around the eyes are also among the applications for an aesthetic and youthful look.

CORNEA - CATARACT - REFRACTIVE DEPARTMENT

Corneal transplantation, premium intraocular lens (Trifocal, add-on, EDOF) applications, Femto-LASIK operations with excimer laser are safely performed with powerful technological equipment. LASIK applications are customized with the wavefront method.

RETINA DEPARTMENT

"Pars Plana Vitrectomy" surgery was performed on patients whose visual acuity decreased to EH (Hand movement) level due to total retinal detachment. In the first month after the surgery, the visual acuity increased to 0.4, approximately tenfold.



PEDIATRIC OPHTHALMOLOGY (STRABISMUS DEPARTMENT)

This department works to protect the eye health of babies from birth, to ensure that their eyes can see fully, that they do not slide, and that they can see in 3D. Strabismus surgeries can be performed in every age group, although it is more common in the younger age group.

ORTHOPTIC CENTER

Lazy eye treatments, 3D vision and fusion exercises are applied successfully. It is used to increase the effectiveness of the surgery before and after the surgery and to strengthen the convergence and fusion in patients with double vision and asthenopic complaints.

OCULOPLASTIC DEPARTMENT

All operations related to the orbit and the eye area, especially lower and upper eyelid aesthetics (blepharoplasty), are performed in this department.

GLAUCOMA DEPARTMENT

All surgical procedures are performed, even trabeculectomy, congenital glaucoma surgery, seton surgery, laser trabeculoplasty.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- **Prof.Dr.Rifat Rasier** - TOD 55th National Congress (2021) Best poster first prize, Comparison of Microenvironment of Small and Large Cell Pattern Artificial Corneal Endothelial Layer
- **Prof.Dr.Rifat Rasier** - Best scientific poster first prize, Ablation of monofocal intraocular lenses with femtosecond laser, ESCRS, European Society Cataract Refractive Surgeon 2021

MEDICAL DEPARTMENTS

GYNECOLOGY AND OBSTETRICS CLINIC ULUS

RISKY PREGNANCIES CLINIC

It operates in coordination with Neonatal and Pediatric Surgery Clinics. Routine first and second trimester fetal malformation screenings, double, triple, quadruple tests which are genetic screening methods, extracellular free fetal DNA tests (NIPT) are carried out. In patient's for which considered necessary, Chorion Villus Sampling (CVS) at 11-14 weeks of pregnancy, Amniocentesis (AS) at 16-20 weeks, after 20 weeks Fetal Cord Blood Sampling (Cordocentesis-FBS), thoracentesis, fetal amniocentesis, fetal amniocentesis, fetal transfusion procedures are carried out. "Intraabdominal and intravesical shunts can be placed in fetuses if medical conditions require. Our morbidity and mortality has been realized as 0 % in fetuses in these interventional procedures."

INVITRO-FERTILIZATION (IVF) CENTER

Service is provided to many patients coming from home and abroad. High success is aimed in treatments by using auxiliary methods, particularly genetic screenings, especially in patients with recurrent IVF failure. "In the past year, more than a thousand patients received treatment and the rate of pregnancy reached to a high figure of 60 - 70 %."

GYNECOLOGY - ONCOLOGY

Routine screenings are performed in the diagnosis and follow-up of gynecological diseases, cervical precancerous lesion. In patients with suspected HPV DNA, colposcopy and LEEP (Loop) Early diagnosis and treatment of these lesions are performed with the Electrosurgical Excision Procedure.

CASE

45 years old patient, who had received various treatments for 6 years with diagnoses of adnexal mass and abnormal uterine bleeding, was operated with suspicion of germ cell tumor, tumor diagnosis was made, and total hysterectomy, bilateral salpingo-oophorectomy, omentectomy and bilateral pelvic lymphadenectomy were performed with laparoscopic method. Patient's pathology result was reported as Stage Ia granulosa cell tumor. Thus, the patient who was diagnosed and treated in the early period was placed under follow-up without requiring additional treatment.



ESTHETIC GENITAL SURGERY (EGS)

At our clinic, operating in Esthetic Genital Surgery (EGS) and sexual health fields, open surgery and surgery with laser are carried out.

Procedures Performed with Laser

Genital warts and chronic vaginitis 38.5%, Urinary incontinence 24%, Vaginal rejuvenation 23%, Laser labioplasty 14.5% "The satisfaction rates have reached 80% - 90% since the tissue recovery process after the laser procedure is very short and it provides a comfortable postoperative process the for patients." "PRP and filler (Hyaluronic acid) applications and genital esthetic applications are also carried out in our clinic. Pelvic reconstructive surgeries are performed via vaginal route in our clinic and a rapid recovery is ensured."

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- Prof.Dr. Bülent Baysal, Assoc.Prof.Dr. Alper Karalök, Surg.Dr. Sibel Malkoç - Speaker - Istinye University ICMAS Academy June 2021
- Prof.Dr. Bülent Baysal ASRM (ASRM (American Society of Reproductive Medicine) Baltimore USA, Participant - 18 - 31 October 2021
- Surg.Dr. Sibel Malkoç - 8th National Dermatological Surgery Days - Ankara Istanbul - Speaker - 18-21 November 2021
- Prof.Dr. Ayhan Sucak, Participant Dr. Lect. Özge Kaymaz Yılmaz - Turkey Maternal Fetal Medicine and Perinatology Association National Congress 29-31 October 2021 Istanbul, Speaker
- Dr.Lect. Berk Bulut - TSM (Reproductive Health and Infertility Association) 10-14 November 2021, Antalya, Istanbul, Participant

MEDICAL DEPARTMENTS

GYNECOLOGY AND OBSTETRICS CLINIC VADISTANBUL

In the Gynecology and Obstetrics Clinic; all diseases related to women's health, changes in pre- and post-natal period and during menopause, gynecological cancers and in vitro fertilization are performed.

Normal Birth:
%34
Cesarean:
%66

Gynaecological
Surgery
%80
Cancer surgery
%20

"The postoperative infection rate was detected as 0% in all surgeries performed in our clinic."

CASE - 1



Radical hysterectomy-related stage Ib3 cervical cancer

CASE - 2



Epithelial ovarian cancer diaphragmatic metastasis

CASE - 3



Epithelial ovarian cancer-related cytoreductive surgery

CASE - 4



Epithelial ovarian cancer- Paraaortic lymphadenectomy

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- Prof. Dr. Aytül Çorbacioğlu - Assoc. Dr. Doğa Seçkin- Op. Dr. Tamer Sözen - Op. Dr. Arzu Bebek - Op. Dr. Gamze Baykan - Op. Dr. İnci - Op. Dr. Şahizar Döner - Birth preparation course - 14/30 July
- Prof. Dr. Aytül Çorbacioğlu Esmer - Symposium on genetics in fetal medicine - 12 September
- Current approach to the axilla in a patient with breast cancer - 25 September

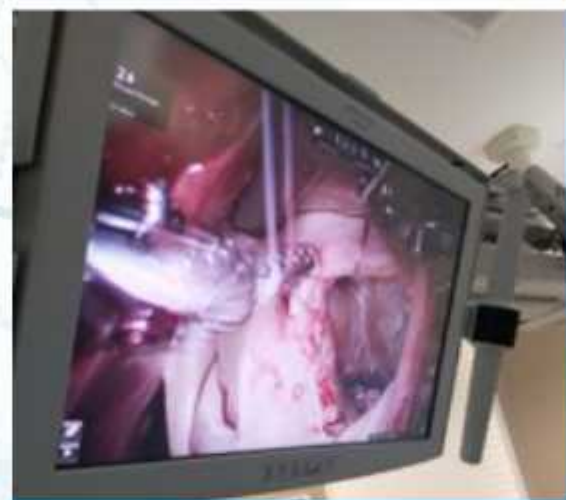
MEDICAL DEPARTMENTS

CARDIOVASCULAR SURGERY ULUS

Heart surgeries of every patient, from newborn to old ages, are successfully performed in Liv Hospital Ulus Cardiovascular Surgery Clinic. All interventions of vascular surgery are performed with both interventional and conventional methods.

MINIMALLY INVASIVE HEART SURGERY

A great success is achieved in mitral valve surgeries, closure of septal defects and bypass surgeries with small incisions without opening the sternum. Two breasts arteries can be removed by using robotic systems bypass surgeries involving multiple vessels are performed with an incision of approximately 5 cm, in accordance with the criteria described as the "golden standard". High success rates are achieved in mitral valve repairs and replacements with the use of robotic systems, making an approximately 3 centimeter inframammary incision.

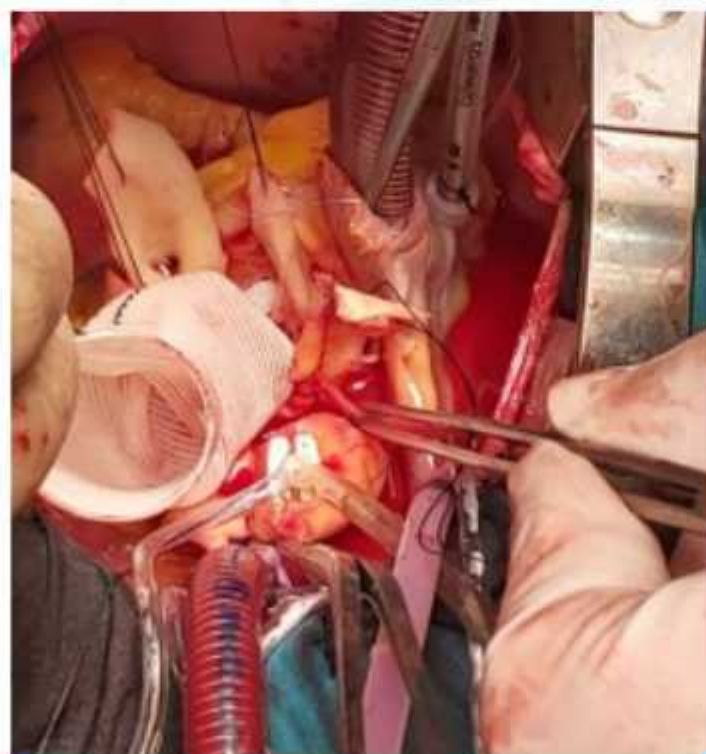


CONGENITAL HEART DISEASES

All complex congenital heart diseases are handled at international standards. All interventions can be performed, both during the operation and intensive care.

AORTIC SURGERY

All kinds of aneurysm and occlusive diseases of aorta can be treated with high technological standards.



VASCULAR SURGERY

Operations are performed with high end methods, both interventional and classical. The patients who are protected from the risk of stroke with aorta surgeries that are performed without sedation can be discharged the next day.



MEDICAL DEPARTMENTS

CARDIOVASCULAR SURGERY VADISTANBUL

Liv Hospital Vadistanbul Cardiovascular Surgery Clinic is a reference center where current treatment methods worldwide are successfully applied. Rapid diagnosis and treatment options are offered to all age groups, from newborn to adult, with a multidisciplinary approach.

ADULT HEART SURGERY

In the clinic, where the use of minimally invasive surgical approach techniques is prioritized, small incisions in procedures such as coronary bypass, aortic and mitral valve surgeries and aortic surgeries are performed by an experienced team. With the **Hypertrophic Cardiomyopathy Follow-up and Treatment Program** and **Coronary Anomaly Surgery Programs** specially initiated in our hospital, special treatment approaches are offered for these complicated diseases.



CONGENITAL HEART SURGERIES

Congenital heart diseases in patients from newborn to adult are evaluated by an experienced team (Pediatric heart surgeon, pediatric cardiologist, cardiac anesthesiologist, cardiac intensive care specialist, neonatal specialist and related pediatric subspecialist) in the council and then a treatment plan is made. Preoperative diagnostic echocardiography, angiography and other cardiac imaging methods are performed within the structure of the hospital.

VASCULAR SURGERY

The treatment of aortic aneurysms is primarily performed by closed methods (EVAR-TEVAR) by cardiovascular surgery. In leg artery diseases where minimally invasive techniques are used, plaques that cause stenosis are treated with angiographic methods, and the hybrid approach, which is applied in combination with angiography and open surgery, allows patients to recover faster with less trauma. In venous surgery, sclerotherapy technique, as well as radiofrequency and laser applications, is also frequently used.

With the **Diabetic Wound Council**, which was formed as a multidisciplinary council, the treatment of foot wounds is carried out with the support of all relevant branches.



MEDICAL DEPARTMENTS

CARDIOLOGY CLINIC ULUS

In Liv Hospital Ulus Cardiology Clinic, rhythm disorders, interventional procedures and imaging methods are applied by expert physicians. In Cardiology Clinic, which is a reference center in terms of imaging and invasive and electrophysiological procedures, more than 50% of the patients are complex patients who have been referred from other hospitals to perform complex procedures.

CASE - 1



Operation risk for the 73-year old patient who had severe heart and renal failure and severe mitral valve insufficiency, was very high. Medical treatment was arranged for the patient whose shortness of breath, decrease in the amount of urine complaints and findings of heart failure are dominant and these got better after a successful "mitral-clip" procedure (Heart valve repair without operation). Discharged in 3 days.

CASE - 2



50-year old male patient had atrial fibrillation attacks that had continued for years and could not be controlled with any medication. He got rid of the rhythm disorder after catheter ablation with the cryoablation method. Electrophysiology catheters and iced balloon inserted into the heart are observed in the image.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Enis Oğuz

- Turkish Society of Cardiology (TKD) Young, Gray Areas in Cardiology Session - Moderator
- TKD-EHRA (European Heart Rhythm Association)- Course Trainer
- Atrial Fibrillation Summit - Chairperson
- 37th International Turkish Cardiology Congress - Spokesperson
- 17th International Congress of Update in Cardiology and Cardiovascular Surgery - Chairperson

Prof. Dr. Alp Burak Çatakoğlu

- Türkiye Klinikleri Cardiology Webinar - Spokesperson - 6th January
- Heart and Health Foundation of Turkey: Cardiology Post Webinar -Panelist- 6th January
- 4 Cardiologists 4 Scenario in Ischemia Spokesperson- Case Presentation- 23rd February
- ACS Live - Moderator - 25th February
- ASPIC 2021 - Moderator - 27th February
- TKD National Interventional Cardiology Congress - Spokesperson - 29th October
- Interventional Cardiology Congress 2021 Update on Chronic Coronary Syndromes - Spokesperson - 30th October
- 17th International Congress of Innovations in Cardiology and Cardiovascular Surgery- Moderator - 5th November
- 17th International Congress of Innovations in Cardiology and Cardiovascular Surgery- Panelist- 7th November
- 37th International Turkish Cardiology Congress - Course Trainer - 18th November

Assoc.Prof. Dr. Tuğba Kemaloğlu Öz

- Turkish Pediatric Cardiology Society Heart Imaging Study Group Meeting - Spokesperson
- CardioAlex 2021 Congress, Egypt- Chairperson
- International Young Academy of Cardiology Congress 2021, Congress Coordinator
- International Young Academy of Cardiology Congress 2021, Chairperson
- World Congress of Echocardiography 2021 - Spokesperson and Chairperson
- 17th International Congress of Update in Cardiology and Cardiovascular Surgery - Chairperson

MEDICAL DEPARTMENTS

CARDIOLOGY CLINIC VADISTANBUL

Liv Hospital Vadistanbul Cardiology Clinic provides services in invasive and noninvasive cardiology fields.



Coronary angiography:	74%	Invasive Procedures
Coronary Stent	20%	
FFR	2%	
IVUS	2%	
Peripheral Procedures	1%	
Paravalvular Leak Closure	1%	

Transthoracic Echocardiography	48,72%	Noninvasive Procedures
Exercise ECG Test (stress test)	39,50%	
Rhythm Holter Test	10,53%	
Transesophageal Echocardiography	0,86%	
Stress Echocardiography	0,39%	

Advance Cardiac Imaging Methods

Any type of advance cardiac imaging methods is used in Cardiology Clinic. (3 dimensional echocardiography, cardiac MRI, cardiac CT). An experienced team provides services on deciding of follow-up and treatment (Medical treatment, valve repair and replacement) of specially cardiac valve diseases, follow-up and treatment of cardiomyopathies and specially hypertrophic cardiomyopathies. Complex structural interventions such as paravalvular leak closure, mitral valve latching, tricuspid valve latching can be performed. Complex vascular interventions such as main coronary stenting, coronary chronic total occlusion procedures, coronary bifurcation procedures and peripheral artery interventions are successfully performed. Complex vascular interventions are performed with intravascular ultrasound (IVUS). Renal **denervation** procedure, which is used in the treatment of resistant hypertension and is very beneficial in selected patients, is performed.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Gökhan Kahveci

- e-cardiology Symposium-An Important Problem in Cardiology Today: Tricuspid Valve Insufficiency, Case Examples and Solution Suggestions-Imaging of Tricuspid Valve Before Percutaneous Procedures-06.10.2021
- ACS 21 Symposium-Expert Opinion: Best Approach in Mitral Regurgitation-The Importance of Imaging in Mitral Regurgitation, / Recorded Course 4 Echocardiography Course in MitraClip - 16-17th October 2021
- 28th National Applied Interventional Cardiology Meeting- Triclip Live In Box-The Importance of Imaging in Triclip: Gökhan Kahveci (Presentation)- 28-31st October 2021
- Heart Valve Repair Studio'21 Current Trends in Mitral Valve Surgery - Webinar-"3 Dimensional Echocardiography: Latest Developments and future innovations in terms of valve surgery" - 22-23rd October 2021
- 37th International Turkish Cardiology Congress - 3-Dimensional Echocardiographic Evaluation with Cases. How Should We Do? Course Training - 18-21st November 2021
- 37th International Turkish Cardiology Congress - Interesting Cases 2 Imaging- Chairperson- 18-21st November 2021
- 37th International Turkish Cardiology Congress - Interventional- Whom, When, How Should We Do? Chairpersons: Ertuğrul Okuyan, Dayimi Kaya-Tricuspid valve regurgitation - whom and when should we intervene? 18-21st November 2021

Assoc.Prof. Dr. Ali Buturak

- ACS 21 Symposium - Recorded Session 4-Best Approach: Many Vascular Diseases + CRF - 16-17th October 2021

Spec. Dr. Utku Zor

- ACS 21 Symposium-Antithrombotics and Anticoagulants in Cardiology - 16-17th October 2021

MEDICAL DEPARTMENTS

OTORHINOLARYNGOLOGY DISEASES & HEAD AND NECK SURGERY ULUS

In Liv Hospital Ulus Otorhinolaryngology Diseases Clinic; medical and surgical treatment of ear, nose, throat and head neck diseases are provided. Head and neck tumors and treatment of balance problems are handled with a multidisciplinary approach. In Liv Hospital Ulus Otorhinolaryngology Diseases Clinic where diseases related to tympanum, tympanic membrane and facial nerves, diseases developed between inner ear and brain are treated; congenital hearing loss is also treated with bionic ear application.

OTORHINOLARYNGOLOGY CLINIC SERVICE FIELDS

- Head and Neck Surgery
- Rhinology
- Autoneurology
- Pediatric Otolaryngology
- Dizziness and Vertigo
- Audiology and Balance Unit
- Audiological - Vestibular Tests
- Otolaryngology / Neurotology
- Voice, Speech and Swallowing Disorders

Otorhinolaryngology Clinic Patient Distribution

- Examination: 82%
- Consultation: 3%
- Control: 5%

DYNAMIC POSTUROGRAPHY IN THE TREATMENT OF DIZZINESS

The most modern medical equipment and treatment methods are used by Lecturer and expert personnel in diagnosis and treatment of diseases. The clinic also has a Balance, Audiology - Speech Disorders Unit. All types of tests that are accepted around the world for evaluation of imbalance and dizziness are performed. Computed dynamic posturography is used for both diagnosis and treatment

Otorhinolaryngology Clinic Surgery Distribution

- Nose surgery %61
- Head and Neck Surgery %28
- Pediatric Airway Surgeries %7
- Ear surgery %4

CASE



Pre- and Postoperative imaging of patient who had Tympanomastoidectomy operation due to chronic ear infection.

MEDICAL DEPARTMENTS

OTORHINOLARYNGOLOGY DISEASES & HEAD AND NECK SURGERY VADISTANBUL

In Liv Hospital Vadistanbul Ear Nose and Throat Clinic; All basic and advanced surgical interventions in the ear, nose and throat area are performed with an experienced team and advanced technological equipment.

SPECIAL PROCEDURES PERFORMED AT OUR CLINIC

- Surgical treatments of advanced head and neck cancers,
- Endoscopic skull base surgeries,
- Facial plastic applications,
- Cochlear implantation applications,
- Surgeries for tracheal stenosis,
- Voice aesthetic applications

an example of special surgical interventions performed in our clinic can be given as an example. In addition, a high level of health care is provided in our sleep apnea, voice and swallowing disorders, and vertigo centers by way of performing applications that involve current treatment approaches.

CASE - 1

Images of a patient with cancer of the upper jaw bone that recurred despite having been operated on three times before. After the cancer tissue was completely removed, the gap formed was repaired with a prosthesis prepared by the dentistry. The patient is now able to eat and talk.



CASE - 2

In the case of tongue cancer, which recurred after surgery and radiotherapy twice, after the cancer tissue was removed together with the jawbone, a pedicled skin and muscle flap taken from the chest area was brought and closed.



CASE - 3

Images of mucocoele and endoscopic surgery that caused bone erosion in the sphenoid sinus and anterior skull base.



CASE - 4

Images of hypoglossal-facial end to side nerve anastomosis after giant cholesteatoma surgery with hearing loss and facial nerve palsy extending to the petrous apex



MEDICAL DEPARTMENTS

THORACIC SURGERY ULUS - VADISTANBUL

All operations related to thoracic surgery are successfully performed in Liv Hospital Vadistanbul and Ulus Thoracic Surgery Clinics. Robotic surgery, videothoroscopic surgery, extended lung resections, mediastinal masses, thymus surgery, thoracic wall masses, tracheal masses and stenosis, surgery of pleural diseases, volume reducing surgeries in emphysema are performed with extremely good results.

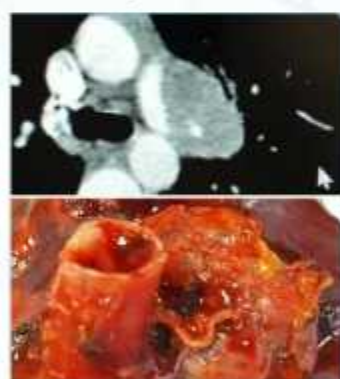
Infection development rate, complication rate and mortality rate are 0% in procedures performed with analgesia and sedation.

The surgeries are mostly performed with closed methods. Robotic surgery and videothoroscopic surgery are included in the closed methods category. In addition to lung surgeries (especially lung cancer) accounting for most of the surgeries, many surgeries are performed for mediastinum, pleura and thoracic wall pathologies.

There has been no complication in patients who underwent lung resection surgeries due to lung cancers and tumors. While their average time with drain was 2.1 days, it was 4 days for discharge from the hospital.

CASE - 1

The patient, who was considered inoperable (Cannot be operated) in other institutions due to their main lung vein, called pulmonary artery, had an invasive appearance, was successfully operated. After the surgery, surgical margins were reported as clean in pathological examinations as well. The patient was discharged on day 3 in good health.



CASE - 3

Lesions that are too small to be found during the surgery under normal conditions can be removed by marking them with tomography prior to surgery in collaboration with the interventional radiology team.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Çağatay Tezel

- 11th National Thoracic Surgery Congress 2021, Videothoroscopic interventions - Segmentectomy and lobectomy
- National Lung Health Congress 2021, Thoracic Surgery Video Case Council: Minimally Invasive Surgery

Distribution of Anesthesia

General anesthesia	%60
Local anesthesia and/or sedoanalgesia	%40

Surgeries in which general anesthesia is utilized Classification according to technique

Robotic surgery	%3
VATS	%64
Open surgery	%17
Other (medx, Mlomy.)	%14

Classification according to indication

Lung surgery	%53
Mediastinum surgery	%14
Pleura surgery	%10
Thoracic wall and diaphragm	%7
Other	%16

CASE - 2

Especially lung and mediastinal masses (including thymus) are successfully operated with robotic system.



CASE - 4

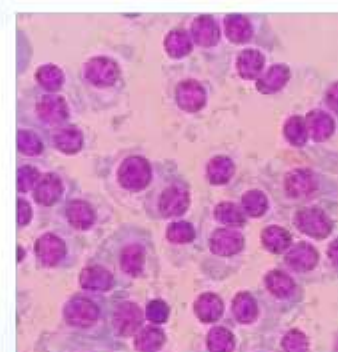
The case who had severe infection that caused necrosis by reaching the lung and reached the skin was treated.



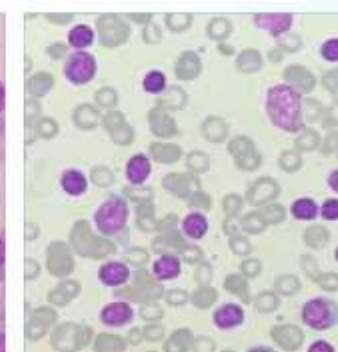
MEDICAL DEPARTMENTS

HEMATOLOGY CLINIC ULUS - VADISTANBUL

In Liv Hospital Ulus and Liv Hospital Vadi Hematology Clinics, diagnosis, advanced examination, inpatient and outpatient treatment of all hematological malignancies, especially leukemia, lymphoma, multiple myeloma, myelodysplastic syndromes, are performed. In addition, advanced examination, follow-up and treatment of other hematological diseases such as anemia, bleeding disorders, microangiopathic hemolytic processes are carried out in both clinics.



Bone Marrow Aspiration: Multiple Myeloma



Peripheral Smear: Chronic Lymphocytic Leukemia

CASE

Plasmapheresis was performed on a patient who used uncontrolled multiple products for detox and subsequently developed microangiopathic hemolytic anemia.

Left image: Normal plasma that we administered to the patient with the aid of apheresis device

Right image: Plasma of the patient we received with the aid of apheresis device

Genetic tests, which have an important place in both diagnosis and treatment selection, are studied by experts in the field with high-level technologies and help the choice of treatment by providing rapid results. Chemotherapy, immunotherapy, palliation or therapeutic radiotherapy treatments are discussed in the councils according to the patient and diagnosis.

In addition to hematological diseases, the Hematology Clinic also provides services with therapeutic apheresis according to the needs of other clinics.



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- 4th Hematological Rare Diseases Congress: Efficacy and Management of Carfilzomib in Relapsed/Refractory Multiple Myeloma
- 3rd Hematology Training and Research Congress: Optimal Treatment Approach in Aged Diffuse Large B-Cell Lymphoma
- XII. EURASIAN Hematology Oncology Congress: Polycythemia Vera Management with Ruxolitinib
- Hematology Specialist Association 15th National Congress. Sessions Moderator

MEDICAL DEPARTMENTS

INTERNAL MEDICINE ULUS

Internal Medicine is the main medical discipline that is responsible with the care of adults with one or more complex, acute or chronic diseases, both in the hospital and in the society. It is patient centered, science based and bases patient care on ethical, scientific and holistic principles. It analyses findings of other medical branches and develops the strategies that are necessary for the diagnosis, treatment and care of the patient.

HOLISTIC APPROACH TO CHRONIC DISEASES

It carries great importance since it is the first clinic that the patients apply with the initial symptoms of the disease. In addition, due to the increase in the aging population and increase in chronic diseases parallel to this, complex and hard to solve problems of the old patients and patients with chronic diseases and maintenance of these problems requiring continuity, a holistic approach is required in the evaluation and maintenance of chronic diseases and this approach is provided by general internal medicine specialists.

IT AIMS FOR EARLY DETECTION

In individuals who do not have a complaint, who are in the risk group due to their age, gender, previous diseases and genetic factors, patients undergo detailed examinations with routine follow-ups.

DETAILED EXAMINATION WITH ROUTINE FOLLOW-UPS

Those who do not have any complaints, are in the risk group in terms of age, gender, previous diseases and genetic factors. Patients are subjected to detailed examinations with routine controls in the individuals involved.



ALL EXAMINATIONS ARE UTILIZED

All necessary examinations such as laboratory (Blood, urine, stool etc.), radiological examinations (X-ray, ultrasonography, mammography, computed tomography, MR, bone densitometry, etc.), endoscopic examinations in necessary situations (Uppergastrointestinal system endoscopy, colonoscopy, etc.) and ECG, echocardiography are utilized and diseases can be diagnosed in the early period.

İç Hastalıkları Kliniği'nde

- Outpatient and inpatient diagnosis, treatment and follow-up of all emergency and chronic internal diseases of adult and geriatric patients.
- Treatment and follow-up of chronic diseases of vulnerable elderly patients who are receiving home care
- Online interview, evaluation and patient follow-up with phone medicine practices
- All care, treatments and clinical observation required in the pre-operative and post-operative periods
- Diagnosis, treatment and follow-up of side effects of treatment that occur after chemotherapy and radiotherapy of oncologic patients
- Examination of healthy individuals and preparation of health board, employment and driver's license reports
- Vaccination in adults and medical practices preventing from other diseases
- Diagnosis, follow-up and treatment of Covid19

Diseases treated in the Internal Medicine Clinic

- Upper and lower respiratory tract diseases
- Infectious diseases (Urinary tract infections, skin infections, liver inflammation (Hepatitis), diarrhea, sexually transmitted diseases, inflammatory diseases of bones and joints)
- Hypertension, diabetes, heart diseases, kidney diseases, blood diseases, thyroid diseases, increase in blood fat such as cholesterol and triglyceride, chronic diseases like hepatic steatosis
- Digestive system diseases such as liver, stomach and gallbladder and bowels
- Hormonal diseases and obesity
- Joint pains and all rheumatologic diseases

MEDICAL DEPARTMENTS

INTERNAL MEDICINE VADISTANBUL

In Liv Hospital Vadistanbul Internal Diseases Clinic; the diagnosis, treatment and follow-up of acute and chronic internal diseases of adult patients are carried out.

In the Internal Diseases Clinic, the diagnosis and treatment of internal diseases is carried out in the clinic and, when necessary, with hospitalization. In addition, when a problem is detected in other branches or when an internal problem is detected in the surgical branch, the patient is followed up together.

Integrated Services Performed in the Internal Diseases Clinic

- Diagnosis, treatment and follow-up of adult and geriatric patients' internal diseases
- Side effects and treatment of pain management that may occur after the treatment of oncology patients
- Adult vaccination service
- Annual control examinations of healthy individuals
- Medical report



GERIATRIC PATIENT FOLLOW-UP

The treatment of patients in the geriatric age group is carried out in a multidisciplinary manner together with other branches.

EMERGENCY SERVICE INTERNAL DISEASES FOLLOW-UP

The treatment, follow-up and, when necessary, parenteral drug administrations of the patients admitted to the Emergency Department are performed daily.

HOME CARE SERVICE

All kinds of treatment and follow-ups are carried out with 'Home Care Services' for patients who need home care after being discharged from the hospital or who will be followed up at home without being hospitalized under certain conditions.



CASE MEETINGS

When it comes to the multidisciplinary approach in the diagnosis and treatment of the patient, 'Case Meetings' are held with the participation of all relevant branches.

COVID-19 PANDEMIC

Patients diagnosed with Covid-19 are treated and followed up, and when necessary, they are hospitalized and followed up in a multidisciplinary manner with related branches.

MEDICAL DEPARTMENTS

LIVMEDCELL REGENERATIVE MEDICINE STEM CELL PRODUCTION CENTER

LivMedCell

Cell/stem cell production is carried out with advanced laboratory infrastructure, up-to-date devices and experts in the field at LivMedCell, which is Turkey's first cellular treatment center under hospital conditions and has international Good Manufacturing Practices (GMP) quality standards. Liv Hospital Regenerative Medicine Stem Cell Production Center is the first center in Turkey where stem cell production is carried out at international standards and hospital conditions.



Indications for Application within the Scope of Trial/Research Treatment

- Covid-19 viral pneumonia
- Spinal cord damage
- Hypoxic ischemic encephalopathy
- Spino-cerebellar ataxia
- Cerebral palsy
- Duchenne muscular dystrophy
- Traumatic brain damage
- Friedreich's ataxia
- Cystic fibrosis
- COPD (Chronic Obstructive Pulmonary Disease)
- Non-progressive congenital myopathy
- Subacute Sclerosing Panencephalitis (SSPE) Disease
- Idiopathic pulmonary fibrosis
- Cellular treatment routine applications
- Autologous chondrocyte for repairing of joint cartilage damages (cartilage cell) (with or without scaffold)
- Autologous originated fibroblast
- Allogeneic umbilical cord originated mesenchymal stem cell applications for the treatment of GVHD.
- Asherman's syndrome
- Optic atrophy
- Type1 diabetes
- Systemic sclerosis



MEDICAL DEPARTMENTS

LIVMEDCELL REGENERATIVE MEDICINE STEM CELL PRODUCTION CENTER

ANNUAL DISTRIBUTION OF CELLULAR PRODUCTS

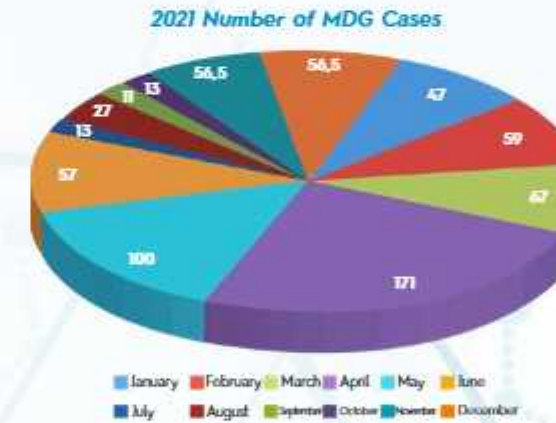
Annual Distribution of Products



Annual Distribution of Fibroblast Product



Annual Distribution of Mesenchymal Stem Cell Product



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Oral Presentations at International Congresses

- Yildirim Koken, G, Abamor, E.Ş., Allahverdiyev, A., **Karaöz, E.** Combined Study of Wharton Jelly-Derived Exosomes and Salicylic Acid in the Treatment of Cutaneous Leishmaniasis, VII. INSAC Uluslararası Doğa ve Mühendislik Bilimleri Kongresi (ICES-2021). 21-23 Ekim
- Yildirim Koken, G, Allahverdiyev, A, Abamor, E.Ş., **Karaöz, E.** Determination of Anti-Promastigote Effect of Extracellular Vesicles Obtained from Wharton Jelly-Derived Mesenchymal Stem Cells for the Treatment of Cutaneous Leishmaniasis, Uluslararası Marmara Bilimler 21-22 Mayıs - Kocaeli

- Ergül Yüksel, Z., **Karaöz, E.** Comparison of Umbilical Cord-derived Early and Late Passage Mesenchymal Stem Cells Isolated by Different Techniques in the Standards of Good Manufacturing Practices, VII. INSAC Uluslararası Sağlık Bilimleri Kongresi 21-23 Ekim

CONGRESS AND SYMPOSIUMS

Prof. Dr. Erdal Karaöz

- Stem Cell Therapies in COVID-19 BIO Turkey-International Biotechnology Congress, 9 - 11 September
- Stem cell-based therapies for COVID-19 International Cellular Therapies and Regenerative Medicine Symposium, May 21-22, Istanbul.
- Modern Possibilities of Stem Cells in Regenerative Medicine, 23 October
- Stem Cells: From Bench to Beds, ISSCA, International Stem Cell Applications Association, 23-24 September - Istanbul
- MSCs on the Road' EMK 22-24 September 2021, Istanbul.
- Azerbaijan Aesthetics and Anti-Age Medicine Congress 22-23 October - Baku - Azerbaijan.

MEDICAL DEPARTMENTS

MEDICAL ONCOLOGY ULUS

In Liv Hospital Ulus Medical Oncology Clinic, chemotherapy is administered to patients from home and abroad, by providing inpatient or outpatient follow-up and treatment. The most convenient treatment decisions are taken with multidisciplinary approach in the Oncology Council for complex cases.

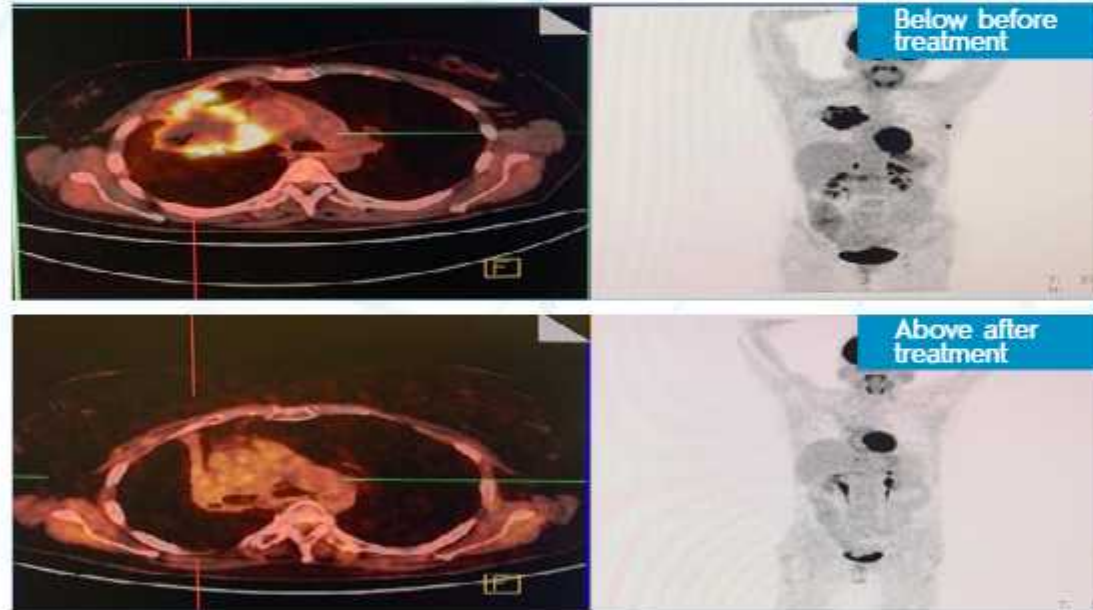
Chemotherapy Treatment Types

- Adjuvant 26%
- Neoadjuvant 9%
- Metastatic 62%
- Definitive chemotherapy 3%



CASE

55 years old female patient, stage 4 lung adenoc, PDL-1 expression 30 percent. The patient refused chemotherapy. immunotherapy only started. With immunotherapy started in November 2018, he is still in full response in 2021/December.



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Duygu Derin

- Mediterranean Society of Oncology - Breast Cancer Symposium - Endocrine Treatment in Breast Cancer Session Moderator - 19.6.2021
- 5th National Urogenital Cancer Virtual Congress - 21-24 October 2021 - Urological Cancers - Session Moderator

Spec.Dr. Meltem Selam Topalgökçeli

- Prognostic Factors in Patients with Urothelial Carcinoma Treated with Atezolizumab - 23 May 2021
- 4th Breast Health Study Group International Meeting, Panelist
- Neuroendocrine tumors with cases - Case Presentation

Assoc.Prof.Dr. Senem Karabulut

- Immunotherapy in GIS Cancers TTOD E-bulletin 2021/6
- Prognostic value of FDG-PET-CT in recurrence of suspicious colorectal carcinoma 2021

MEDICAL DEPARTMENTS

MEDICAL ONCOLOGY VADISTANBUL

In Liv Hospital Vadi Oncology Clinic; all different treatment options are offered to each patient, which is individualized, customized and applied around the world.



CASE - 1

A pregnant patient with breast cancer did not want her hair to fall out, so prenatal chemotherapy was administered with digicap and her healthy baby was born.



CASE - 2

According to the results of the NGS (Next generation sequencing) test performed on a female patient with metastatic sarcoma in individualized treatment, a very good clinical response was obtained in the patient using smart drugs and without chemotherapy.

CASE - 3

A 41-year-old male patient with paraganglioma, a rare tumor, was administered medications according to NGS test, succinate dehydrogenase cancer gene carrier was found in his family and himself, and genetic counseling was provided to the family.

SCIENTIFIC AND OCCUPATIONAL ACTIVITIES



Prof. Dr. Çiğdem Usul Afşar

- 8th Turkish Medical Oncology Congress - Toxicity Management III - Session Moderator- 05.11.2021
- Mediterranean Oncology Association, Medical Park Breast Cancer Symposium "Risk Scoring with Genomic Analysis and Its Effect on Adjuvant Therapy"- 19.06.2021

MEDICAL DEPARTMENTS

NEPHROLOGY AND HYPERTENSION CLINIC ULUS

All kinds of diseases such as hypertension, nephritis, chronic kidney disease, kidney cysts, are followed up and necessary procedures/treatments are performed in Liv Hospital Ulus Nephrology Clinic.

Preventive medicine regular follow-up is very important

Kidney disease is frequent, insidious but treatable. Kidney patients are usually elders who have many diseases, and use a lot of medicines. If kidney problems are not intervened in time or doses of medicine are not properly arranged, kidney problems may get worse. For this reason, preventive medicine, regular follow-up are very important. Operations of patients with kidney problems also must be carefully followed up. Nephrology Clinic provides treatment and surgeries that are performed with minimal risk in these type of difficult cases by close collaboration with related branches.

Early diagnosis may save the patient from life long medicine treatment

It is very important for primary evaluation to be accurate in nephrology and hypertension patients for the treatment to be successful. Sometimes whether hypertension or renal problems could be the indicators of another disease that is hiding. These patients can be saved from lifelong medicine treatment with early diagnosis. Even simple diseases can lead to serious problems if not treated in time.



Scintigraphy shows a kidney with reduced functions as a result of a kidney artery occlusion due to Covid 19 infection.

Blood pressure control is important in kidney patients

- Reason of the blood pressure may be kidney disease.
- The reason of the Kidney disease may be high blood pressure.
- Irregular Blood pressure may damage the kidney functions.
- The most important treatment for many kidney diseases patient is blood pressure control.
- Too low blood pressure may also damage the kidneys, so close follow-up is very important.
- Sometimes it can be difficult to understand whether the chicken or the egg comes first, blood pressure or kidney disease first, but blood pressure control is very important in kidney patients, whichever comes first.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Tekin Akpolat

- Telemedicine Applications in Nephrology. XIII. Çapa Nephrology and Transplantation Days, 27th February, 2021, Online.
- Protecting Kidney Health. Istanbul Rumeli University III. Hemodialysis Symposium, 11th March 2021, Online.
- How Much Salt Should We Eat? How Much Water Should We Drink? Digital Pharma Summit, 27th March 2021, Online.
- Does Air Pollution Increase Blood Pressure? 23rd National Hypertension and Kidney Diseases Congress, 24th September 2021
- Food Additives and Kidney. 38th National Nephrology Hypertension Dialysis and Transplantation Congress, 15th October 2021



MEDICAL DEPARTMENTS

NEPHROLOGY AND HYPERTENSION CLINIC VADISTANBUL

In Liv Hospital Vadistanbul Nephrology Clinic, the detection and protection of patients in the risk group for kidney failure, including diabetes and hypertension, the follow-up and treatment of patients with acute and chronic kidney failure at every stage, and renal replacement therapy of patients with end-stage renal failure are performed.



With the hemodialysis device, which also includes the Reverse Osmosis water treatment system, support can be provided to patients whose treatment we can continue under clinical conditions.

Organ/Kidney Transplantation Center was established to meet the hemodialysis needs. The center serves adult and pediatric patients.

PERMANENT METHOD OF TREATMENT OF RESISTANT HYPERTENSION:RENAL DENERVATION

Hypertension treatment is a whole. Change of lifestyle is the first step for this. Limited salt intake, transforming regular physical activity into a part of lifestyle and raising patient awareness form the basis of this step. Second step is the medication treatment. Renal Denervation, which is an interventional treatment performed in selected cases with a multidisciplinary approach, is a complementary treatment step and takes its place as a new treatment method that is safe, permanent and life-long independent from patient compliance. With this treatment, the efficacy of treatment increases independently of patient compliance, the number of medication used by the patient can be reduced, and the treatment goals can be reached effectively and safely by reducing the risk of medication side effects due to multiple medication use.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Nail Suat Ünver

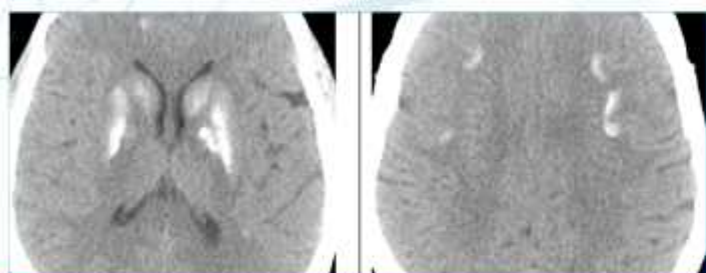
- New Developments in Renal Transplantation, Koç University Istanbul - Exhibitor- 18 December
- Kidney Failure with Cases, Kazakhstan - Speaker - 8 November
- Why Kidney Transplant, Almaty Kazakhstan - Speaker - 8 November
- 38. National Nephrology Congress Kyrenia, TRNC - Participant - 13-17 October
- Turkish Society of Nephrology Impressions from ERA-EDTA 2021 Congress (Online) - Participant- 10 June
- Turkish Association of Hypertension and Kidney Diseases: From Clinical Acidosis to Prescription Metabolic Acidosis Treatment (Online) 12 June
- Turkish Society of Nephrology Correct Monitoring and Timely Treatment in Fabry Disease - March 31
- Turkish Society of Nephrology Sugar Management in Diabetic Kidney Patient - February 25
- Hypertension Dialysis and Transplantation Society: What Has Changed in the Pathophysiology and Treatment of Glomerulonephritis - January 28
- National Nephrology Congress 13-17 October

MEDICAL DEPARTMENTS

NEUROLOGY ULUS

Liv Hospital Ulus Neurology Clinic provides multidisciplinary approach to the patients with the assistance of Brain Surgery and Neuroradiology clinics. It continuously updates itself in collaboration with Rheumatology, Endocrinology, Hematology, Infectious Diseases, Ophthalmology, Genetics Clinics, and becomes more effective in solving and treating difficult cases with laboratory assistance. It helps many patients with life-threatening conditions with its strong Intensive Care Clinic.

CASE - 1



23-year-old young girl received treatment with diagnosis of hypoparathyroidism and hypocalcemia after she had complaints of epileptic seizures and continuous confusion, inertness states that occurred in the process of graduation from university; now she works in an international company without any complaint.

CASE - 3

78-year-old male patient had clouding of consciousness after use of antibiotics that contained Ertapenem, non-convulsive status epilepticus / the epileptic status that causes altered mental status instead of spasms, he got better after changing his antibiotics.

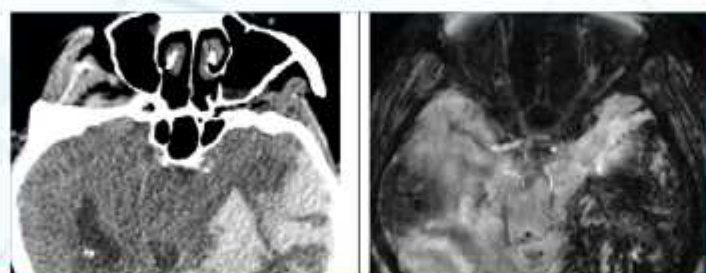
CASE - 5

66-year old patient was monitored in the intensive care unit for 46 days due to Covid 19 infection. The patient who had no movement in their arms and legs was diagnosed with critical illness neuropathy and myopathy upon having asymmetrical motor and sensorial response anomalies and not having activity except motor activity indicating muscle involvement in a couple muscles. They started using their hands and walk with support within weeks, their right median nerve and left peroneal nerves still could not be stimulated and were not showing muscle activity, it was concluded that they had vasculitic asymmetric secondary nerve involvement secondary to Covid 19 in addition to critical illness neuropathy.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

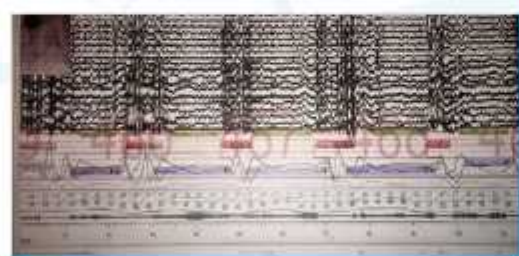
- **Prof. Dr. Nebil Yıldız** - Speaker - Neurological Society, Neuromuscular study group "Polyneuropathy course with tips" - 11.04.2021
- **Prof. Dr. Nerses Bebek** - In addition to President of Turkish Epilepsy Society, he was elected to the Administrative Board of Turkish Neurology.

CASE - 2



66-year-old female patient presented with sudden right weakness and loss of consciousness, she had thrombosis / clot in the left transverse sinus and inferior anastomotic vein / lower left broad vein of the brain and severe bleeding (CT and MRI/bleeding sequence) secondary to inverse segregation of blood that pushed midline structures and caused coma, she had partial recovery with decompressive surgery and anticoagulant treatment.

CASE - 4



24-year-old male patient had complaint of sleep groaning and inability to breathe while groaning, in the polysomnography examination that was carried out throughout the night, he had groaning resembling a slight motor sound that could last up to 27 seconds (dark gray sinusoidal areas and respiratory arrests marked with blue) and accompanying central respiratory arrests; it was recommended to him to use CPAP device that continuously delivers compressed air at night, when necessary.

MEDICAL DEPARTMENTS

NEUROLOGY VADISTANBUL

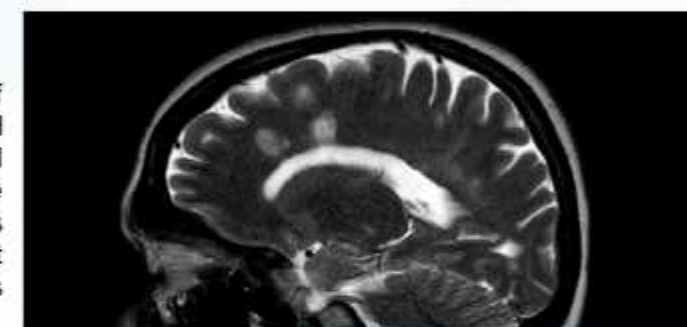
Liv Hospital Neurology Clinic; provides services such as epilepsy, stroke, dizziness, neuropathic pain, tumors, muscle and nerve diseases, movement disorders, as well as clinics such as headache, memory health, dementia and sleep.

CASE - 1

Our patient, who was diagnosed with normal pressure hydrocephalus (NPH), and whose clinic was improved after the shunt operation performed by the Brain and Nerve Surgery Clinic; NPH is a condition characterized by urinary incontinence, gait disturbance, and forgetfulness. NPH can develop after cerebral hemorrhages, hemorrhages under the cerebral cortex, head injury, brain surgeries, and infections. In cases with a pre-diagnosis of NPH; after hydrocephalus is diagnosed on CT and MRI, LP is performed to understand whether the pressure is normal, and whether they will benefit from surgical treatment. Shunt surgeries are most frequently performed in the treatment of normal pressure hydrocephalus. It is important to detect it clinically in terms of being treatable dementia.

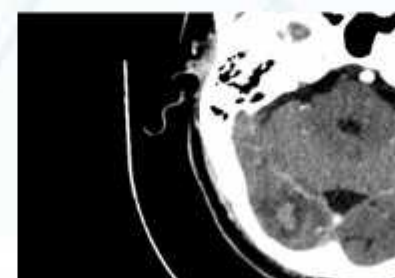
CASE - 2

A 41-year-old female patient presented with complaints of numbness in the right arm and leg, clumsiness in the hand, and dropping the objects that she had picked up, which started 1 month ago. Complaints started to appear in the corners of the face and mouth. A typical MS (Multiple sclerosis) image was present on the MRI taken of a patient who had incompetent hand findings at the forefront of his examination. Patient's follow-up and treatment are continued.



CASE - 3

A 64-year-old patient, known to be hypertensive before, came to the emergency department with complaints of nausea lasted 2 days. During the neurological examination, the bleeding area was detected by CT examination of the patient with a visual field defect and he was discharged with recovery after treatment.



CASE - 4

A 36-year-old female patient presented with weakness in the wrist after a long flight and sleeping in the same position. In the EMNG examination of the patient, who had mild bulging findings in the neck MRI, there was early axonal involvement of the radial nerve of the forearm segment. A patient was monitored with a preliminary diagnosis of "Saturday-night palsy" and palliative treatment was prescribed.



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Ayhan Öztürk

- Western Black Sea Neurology Meeting - Covid Period MS Patient Approach and Management of the Clinic - MS and Covid "Current Approach and Treatment Meeting" - Speaker - May 24
- Neuromonitoring in Brain Tumor Surgery-Current Approach in Central Nervous System Tumors-Moderator-1 November
- Brain and Behavior: Liv Hospital Vadistanbul - November 2 - Speaker
- Lipids in All Aspects: Liv Hospital Vadistanbul Conference Hall - Moderator - 7 December
- **Assoc.Prof.Dr. Belma Doğan Güngen** - Belma Doğan Güngen - Lecturer - "Sleep Health and Technology Addiction Symposium" with Mustafa Kemal University

MEDICAL DEPARTMENTS

NUCLEAR MEDICINE ULUS - VADISTANBUL

In Liv Hospital Ulus and Vadistanbul Nuclear Medicine Clinics, advanced metabolic imaging methods, functional scintigraphic examinations and various radionuclide treatments are applied.

Complicated cases are evaluated in the council.

The Nuclear Medicine Clinic is kept under constant surveillance in terms of radiation safety. Diagnosis-treatment and clinical services are provided under the most favorable conditions in terms of employee and patient safety. Interpretation of results of examinations performed in other centers are performed and consultation and counseling services for treatment decisions are provided. The clinic actively participates in the councils in the resolution of difficult cases.

Nuclear Medicine Clinic serves with;

- PET-BT imaging
- (Oncological F-18 FDG PET, Ga-68 labeled compounds/PSMA and DOTA-TATE studies)
- Dual-head gamma camera system with dynamic-static imaging and whole body scanning and 3D imaging (Scintigraphic imaging)
- SPECT-CT fusion programs
- Software containing quantitative programs
- C-14 urea breath test system for the diagnosis of Helicobacter pylori
- Surgical gamma probe
- 2-bed isolated treatment room.

RADIONUCLIDE TREATMENTS APPLIED IN THE NUCLEAR MEDICINE CLINIC

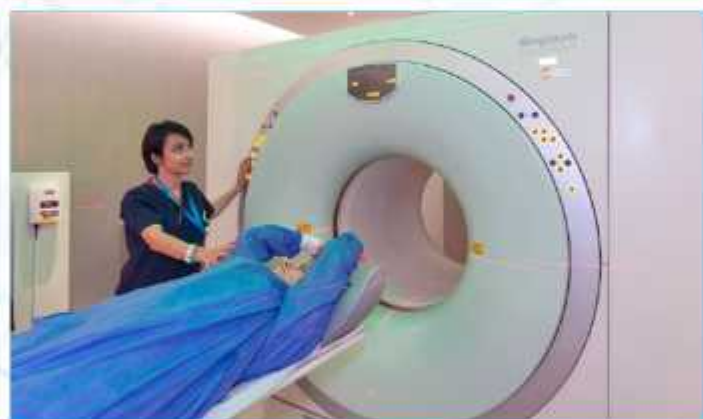
- Iodine-131 therapy
- I-131 MIBG therapy
- Intraarterial, Y-90 microsphere/Ho-166 (Targeted therapies in liver tumors)
- Lu-177 labeled therapeutic compounds (PSMA and DOTA peptides)
- Radium-223 therapy (Xofigo)
- Actinium-225 (Alfaradin)

CASE

A 60-year-old male patient with metastatic prostate cancer. His disease progressed despite the other treatments he received. He has pain and mobilization difficulties due to diffuse bone metastases. In the Ga-68 PSMA PET study performed (lower row), it was observed by confirming diffuse metastatic lesions, that the activity involvement in the metastatic foci disappeared in the patient for whom Lu177 PSMA treatment was decided (top row). While the PSA level was 155 before the treatment, it decreased to 0.16 after the treatment.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

The project titled "Development of Active Armored Gamma Probe" led by Onur Buğra Kolcu, Doctor Lecturer of Istinye University Faculty of Basic Sciences Department of Physics, was entitled to be supported within the scope of TUBITAK-1005 National New Ideas and Products Research Support Programme. **Prof. Dr. Emel C. Günay** is in the project team.



"No major complications were observed after the treatment in the patients in the Nuclear Medicine Clinic. In general, the patients' quality of life has improved."

Distribution of Procedures Performed in 2021

PET-CT	% 75
Radionuclide Treatment	% 10
Other (scintigraphy/urea breath)	% 15

MEDICAL DEPARTMENTS

RADIATION ONCOLOGY ULUS - VADISTANBUL

Liv Hospital Radiation Oncology serves as the 31st center in the world using Linak (Unity MR Linak) combined with 1.5 Tesla MR, and the first center in Istanbul.

- Stereotactic Radiotherapy and IMRT applications are performed for both brain and body foci with the Versa HDRS device.
- We are the leading center, using notably hybrid applicator technology that combines intra-tissue and intra-space applications in brachytherapy. Our publication on this subject received the "Brachytherapy Special Award" of the Turkish Society for Radiation Oncology.
- In 2021, professional visits to our center are conducted by 23 visitors with the aim of observing the specific services.

Rates of Procedure performed with UNITY 1.5 Tesla MR-Linak

- Prostate - Bladder Cancers 35%
- Liver - Pancreas - Adrenal Gland Cancers 21 %
- Lymph nodes - Soft tissue cancers 23%
- Rectum cancer 12%
- Head - Neck and Brain Tumors 9 %

Rates of Procedure performed with VERSA HD-RS

- Image-Guided Intensity-Modulated Radiotherapy (IG-IMRT) 75 %
- Stereotactic radiotherapy/radiosurgery (25 %)
- Extracranial Stereotactic Body Radiotherapy (SBRT) 13 %
- Brain Stereotactic Radiosurgery (SRS) 12 %



Rates of Procedure performed with BRACHYTHERAPY

- Gynecologic tumors 94%
- Skin-soft tissue 5%
- Prostate cancer 1%

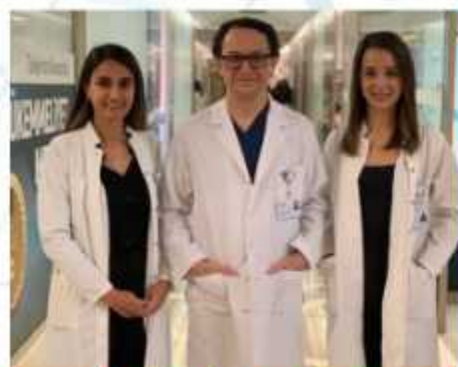


OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- **Prof. Dr. Merdan Fayda** - Advances in Prostate Cancer Treatment - Consensus Guidelines and Evaluation - Brachytherapy Clinical Experience - Nigerian Society of Radiation and Clinical Oncology (ARCON) Workshop - September 2021
- **Exp. Dr. Gökrem Türkkan** - Exp. Dr. Gökrem Türkkan - Combinations of Immunotherapy and Radiotherapy in Gastroenterological Cancers - 11th International Gastrointestinal Cancers Conference, Invited Speaker - Istanbul, 2-5 December

MEDICAL DEPARTMENTS

OBESITY AND METABOLIC SURGERY ULUS - VADISTANBUL



'Obesity Surgery Team'
consisting of an obesity surgeon,
psychologist and dietician

Before deciding on surgery in Liv Hospital Ulus and Vadi Obesity and Metabolic Surgery Clinic, body analysis is performed by a bariatric nutritionist and referred to an obesity and metabolic surgery specialist. The decision for surgery is made by making detailed evaluation.

What examinations are performed on patients to be operated?

- Biochemistry-Blood-Electrolyte-Vitamin Analysis
- Endocrinological Evaluation
- Cardiology-Echocardiographic Evaluation
- Pulmonary Diseases-Respiratory Function Test Evaluation
- Gastroenterology-Endoscopic (Gastrosocopy) Evaluation
- Psychiatric-Psychological Evaluation
- Anesthesia Evaluation

Robotic and laparoscopic methods are used

The surgeries are performed with high standard operating room laparoscopic or robotic surgery techniques. The average hospitalization duration of the patients is 3 (three) days. Information about nutrition education is given before discharge, and follow-up appointments are scheduled after discharge.

OPERATION PERFORMED

- 1- Laparoscopic/Robotic Sleeve Gastrectomy 70%
- 2- Laparoscopic/Robotic Gastric Bypass 10%
 - a. Roux en Y Gastric Bypass
 - b. Mini Gastric Bypass
- 3- Laparoscopic/Robotic Revision Surgery 10%

ENDOSCOPIC PROCEDURES PERFORMED



Endoscopic Adjustable 1-Year
Gastric Balloon Application



Laparoscopic Sleeve Gastrectomy Surgery

MEDICAL DEPARTMENTS

OBESITY AND METABOLIC SURGERY ULUS - VADISTANBUL

HIGH WEIGHT LOSS, LOW COMPLICATION

"Weight loss rates for all surgeries are above the international average. Complication rates are lower than standards. Liv Hospital Obesity and Metabolic Surgery Clinic provides services above international standards with low complication rates and high weight loss values."

Surgical Complication Rates

- 1- Sleeve Gastrectomy
 - a. Leak: 0% b. Hemorrhage: 0.2%
- 2- Gastric Bypass
 - a. Leak: 0% b. Hemorrhage: 0%
- 3- Revision Surgery
 - a. Leak: 0% b. Hemorrhage: 0%

Percentage of Excess Weight Loss in Surgery

- 1- Sleeve Gastrectomy: 77%
- 2- Gastric Bypass and Revision Surgery 81%
- 3- Endoscopic Gastric Balloon 54%



Laparoscopic Sleeve Gastrectomy -
Percentage of 5th Year Excess Weight Loss 89%

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Halil COŞKUN

- Turkish Obesity Surgery Society 5th Winter School, Is it Possible to Establish a Standard Technique in Sleeve Gastrectomy? 27.02.2021 (Speaker)
- Turkish Bariatric Surgery Foundation, Bariatric Surgery and Dietician E-Congress, Single Anastomosis Gastric Bypass, Technical Application, 16.04.2021 (Speaker)
- II. Active Life, Current Approaches in Food and Nutrition Congress, Bariatric Surgery, Doctors Successful What About Patients? 08.05.2021 (Speaker)
- 7th National and 6th Mediterranean Morbid Obesity and Metabolic Diseases Congress, Revision of RYGB (Distalization) 24.10.2021 (Speaker)
- 7th National and 6th Mediterranean Morbid Obesity and Metabolic Diseases Congress, Medium and Long Term Results in Revisional Surgeries, 24.10.2021 (Sessions Moderator)
- 7th National and 6th Mediterranean Morbid Obesity and Metabolic Diseases Congress, MBC Multidisciplinary Teamwork, 24.10.2021 (Sessions Moderator)
- Endoscopic Laparoscopic Surgery Congress, Minimally Invasive Bariatric and Metabolic Surgery Course, 17.09.2021 (Sessions Moderator)
- Endoscopic Laparoscopic Surgery Congress, Single Anastomosis Gastric Bypass, 17.09.2021 (Speaker)
- Endoscopic Laparoscopic Surgery Congress, Revision Surgery, 18.09.2021 (Speaker)
- Endoscopic Laparoscopic Surgery Congress, The Effects of Tissue Supports on Complication Prevention in Bariatric Surgery, Satellite Symposium, 29.09.2021 (Moderator)

Dietician Nida Yıldız

- Turkish Bariatric Surgery Foundation, Bariatric Surgery and Dietician E-Congress, Postoperative Special Conditions - Pregnancy - Type 2 Diabetes - Lipid and Thyroid Management, 18.04.2021 (Speaker)
- Üsküdar University, Sustainable Dietetics, Future of Dietetics, Sustainable Nutritional Approach in Bariatric Surgery, 6.06.2021 (Speaker)
- İstanbul Kültür University, Faculty Internship Days, Collective Nutrition Practices in a Corporate Company, 20.05.2021 (Speaker)
- 7th National and 6th Mediterranean Morbid Obesity and Metabolic Diseases Congress & 2nd Metabolic and Bariatric Surgery Dieticians Congress, Case Report of Dumping Syndrome, 25.10.2021 (Speaker)
- Bahçeşehir University, BES 4080 Bariatric Surgery and Nutrition Course, Spring Semester of the 2020 - 2021 Academic Year (Guest Lecturer)

MEDICAL DEPARTMENTS

ORTHOPEDICS AND TRAUMATOLOGY CLINIC ULUS

Liv Hospital Ulus Orthopedics and Traumatology Clinic forming the "Regional Orthopedics" clinic infrastructure; provides 24/7 personalized treatments with physicians specialized in hand, knee, hip, shoulder, spine and foot, ankle fields. Successful treatments are performed with robotic knee and hip surgery.

CASE - 1



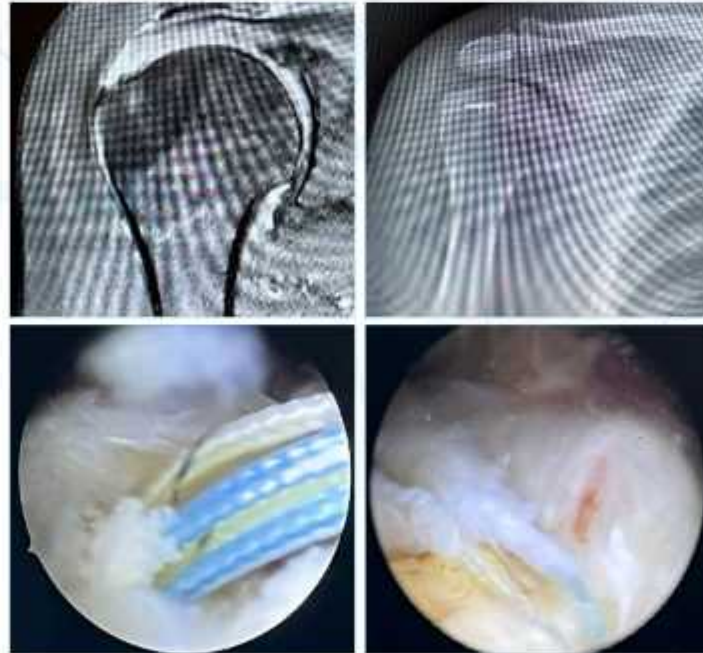
Scoliosis Surgery: Vertebral column resection and posterior instrumented fusion were performed to 15-year old female patient who had complaints of severe curvature on back and related pain, shortness of breath with a posterior approach.

CASE - 2



Robotic Hip Surgery: Robotic hip prosthesis was placed to the left coxarthrosis of a 65-year-old female patient.

CASE - 3



Arthroscopic repair: A 57-year-old male patient had arthroscopic repair for a right rotator cuff lesion.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- Prof. Dr. Çağatay Öztürk - TOTBID 2021 National Congress Guest Spokesperson
- Prof. Dr. Erden Ertürer - The Association of Bone and Joint Surgeons 2021 Congress - Spokesperson

MEDICAL DEPARTMENTS

ORTHOPEDICS AND TRAUMATOLOGY CLINIC VADISTANBUL

Liv Hospital Vadistanbul Orthopedics and Traumatology Clinic provides personalized treatments with physicians specialized in their fields. The Orthopedics and Traumatology Clinic, which provides 24-hour uninterrupted service, also successfully treats emergency trauma cases.

CASE - 1



70-year old female patient with diagnosis of fibrosarcoma extending to the cervical thoracic spine, had tumor resection and anterior+posterior instrumentation surgery

CASE - 2



60-year old female patient had internal fixation with plate+screw for proximal humerus fracture.

CASE - 3



6-year old female patient with Larsen syndrome related left congenital knee and patella dislocation, had reconstruction.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- Prof. Dr. Ufuk Aydın - AOSpine 2021 Meeting - Spokesperson
- Assoc.Prof. Dr. Bahadır Gökçen - Marmara Spine Group Monthly Meeting - Spokesperson
- Assoc.Prof. Dr. Gürkan Gümüşsuyu - European Sports Medicine Symposium - Participant
- Assoc.Prof. Dr. Şenol Bekmez - Canadian Orthopedic Association 2021 Annual Congress - Oral Presentation
- Assoc.Prof. Dr. Şenol Bekmez - Deformity Reconstruction School - Spokesperson

MEDICAL DEPARTMENTS

RHEUMATOLOGY ULUS - VADISTANBUL

Diagnosis, treatment and follow-up of various rheumatologic diseases are performed at Liv Hospital Rheumatology Clinic. In our hospital with latest technology and possibilities, rheumatologic diseases are approached with a multidisciplinary team consisting of specialist physicians in different branches.

Most frequently followed-up diseases

- Connective tissue diseases (Rheumatoid Arthritis, SLE, Sjogren's Syndrome, Myositis, Scleroderma)
- Spondyloarthritis (Ankylosing Spondylitis, Psoriatic Arthritis, Reactive Arthritis, Enteropathic Arthritis)
- Vasculitis (ANCA-related vasculitis, Temporal arteritis, Takayasu, Behçet's Disease etc.)
- Geriatric Rheumatologic Diseases
- Familial Mediterranean Fever
- Crystal arthritis (Gout arthritis)
- Sarcoidosis
- Soft tissue rheumatism

CASE - 1

Data on pregnancy and sarcoidosis are conflicting in the literature. There are publications showing the positive effect of pregnancy on the disease and publications showing that pregnancy may cause disease progression. A 32-year-old female patient with complaints of erythema nodosum, dry cough and exertional dyspnea, and arthritis in both ankles, and bilateral hilar lymphadenopathy and interstitial changes were detected on thorax CT taken approximately 1 year ago. A diagnosis of sarcoidosis was made as a result of EBUS biopsy. No radiological examination was performed on the patient who stated that she was pregnant and patient was followed up with low doses of steroids and HQ. The patient, whose pregnancy went well, came to the follow-up after cesarean section. No complications were observed in the premature baby and mother. There was no obvious pathology in the physical examination. The current treatment of the patient with a good general condition was continued and was monitored.



Bilateral hilar lymphadenopathy on thorax CT

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Şenol Kobak

- Target Rheumatology Congress 2021,
- National Rheumatology Congress 2021
- Rheumatological Diseases and Covid 19 Infection Symposium

CASE - 2

We report the development of secukinumab-associated Raynaud's phenomenon in a 35-year-old female patient with ankylosing spondylitis.

About 8 years ago, patient was diagnosed with Ankylosing spondylitis as a result of examinations with complaints of low back pain, morning stiffness and movement restriction. Patient has used different medications during this time, he has only been followed up with NSAIDs and exercise for the last year. Since the last 3 months, patient has been admitted to the Rheumatology Clinic with complaints of exacerbation of lower back and hip pain, morning stiffness lasting more than 1 hour. It was evaluated as disease activation in the light of clinical, laboratory and radiological findings. The patient was started on anti-IL17 (Secukinumab). In the 3rd month of the treatment, the patient presented for follow-up. Patient said that after secukinumab was administered, there was a discoloration (whitening, yellowing, bruising) in the hand and finger joints, and stated that it continued for one or two days. The absence of any underlying pathology and its occurrence only after Secukinumab administration was considered as a Secukinumab-associated Raynaud phenomenon.



Discoloration of both fingers consistent with Raynaud's phenomenon

MEDICAL DEPARTMENTS

ORGAN TRANSPLANTATION VADISTANBUL

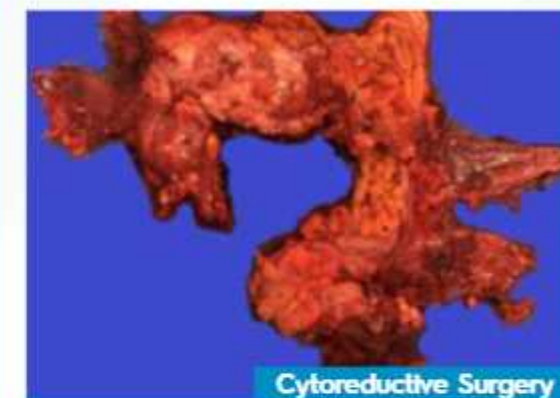
Liv Hospital Vadistanbul Organ Transplant Team meets the needs of patients with chronic renal failure such as temporary or permanent hemodialysis catheter, peritoneal dialysis catheter, arteriovenous fistula, in addition to cadaveric and living donor kidney transplantation.



HIPEC Application



Cytoreductive Surgery



In Liv Hospital Organ Transplantation Center; the transplantation process is carried out by experienced and specialist physicians, scientists and health professionals, who are experienced in the field of kidney transplantation, using the latest technology and up-to-date methods.

OUR SERVICES

- Donor-recipient evaluation and preparation before organ transplantation
- Processes until the day of the transplantation (Dialysis, accommodation, etc.)
- Kidney transplantation from a living donor (such as relatives, ethics committee)
- Postoperative treatment and care processes
- Robotic and laparoscopic surgery
- Registration of Patient on the National Organ Transplant Waiting List (Only for Turkish citizens.)

CASE - 1



Anastomosis between the graft artery and the external iliac artery (end-side)



Reperfusion of transplanted kidney

OUR TARGET: OFFERING NEW LIVES

A new life full of health is aimed for the physicians in organ transplant surgery, nephrology and other branches, who are experienced in the field of kidney transplantation and who have achieved many successes, and individuals who experience the negativities of chronic kidney failure and dialysis procedures.

ROBOTIC KIDNEY TRANSPLANTATION

Liv Hospital Organ Transplantation Center is a reference center where you will find experienced and expert team, up-to-date technology and treatment approaches in kidney transplantation, which is the most effective treatment method in chronic kidney failure.

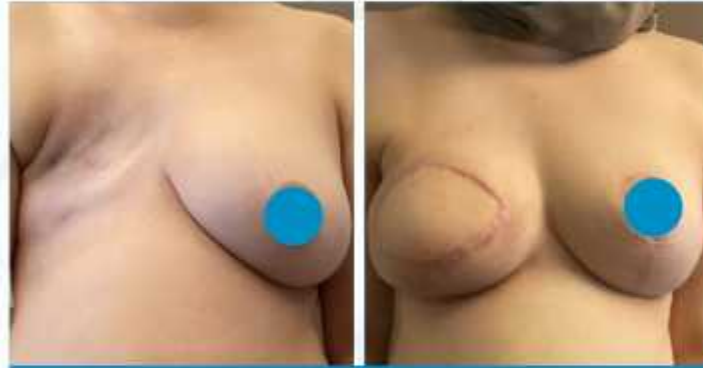
MEDICAL DEPARTMENTS

PLASTIC, RECONSTRUCTIVE AND ESTHETIC SURGERY CLINIC

In Liv Hospital Plastic, Aesthetic and Reconstructive Surgery Clinic, Facial and whole-body tissue loss, trauma tumor or post-cancer repair is performed with standard and microsurgical techniques. Personalized treatments are given in aesthetic surgery with technological infrastructure. With the Liv Hospital Regenerative Medicine Stem Cell Production Center, provides specific stem cell treatments for burn scars, face to slow the effects of aging and hair loss.

Plastic, Reconstructive and Esthetic Surgery Rates
Esthetic Surgery 18%
Reconstructive Surgery 82%

CASE - 1



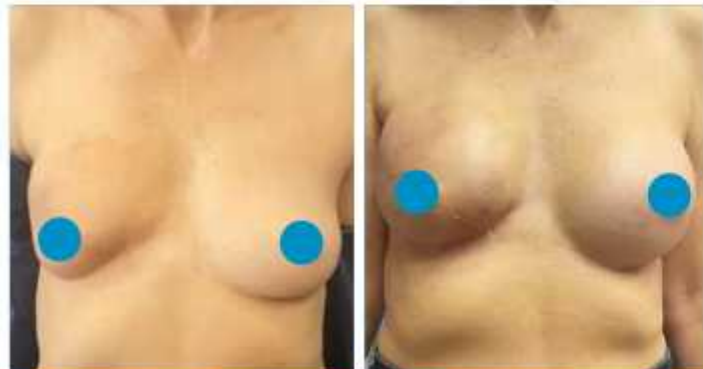
Patient with mastectomy for right breast cancer:
Late-term repair with latissimus dorsi flap

CASE - 2



Meningomyelocele defect:
Repair with bipedicle flap

CASE - 3



Right breast cancer: Defect repair with silicone
prosthesis after oncoplastic surgery

CASE - 4



Pressure sore: Repair with flap

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- Medical Park Breast Cancer Symposium (Online Meeting-Antalya Oncology Association) 19.06.2021

MEDICAL DEPARTMENTS

PSYCHIATRY CLINIC ULUS - VADISTANBUL

Liv Hospital offers psychiatric treatments and psychotherapy services in two hospitals, Liv Hospital Ulus and Vadistanbul.

Psychiatry Department
Psychological Counseling Department
Individual Counseling and Therapy: 62.88%
Consultation: 34.55%
Family and Couple Counseling: 2.57%

LIV HOSPITAL THE CHRONIC PATIENT CONSULTATION CLINIC

Firstly designed in Turkey. "The Chronic Patient Consultation Clinic" brings together the chronic patients and psychiatrists, clinical psychologists and art therapists specialized in their fields. The Chronic Patient Consultation Clinic includes various programs such as medical support planning, individual psychological counseling, experience sharing groups, family and couple counseling, and art therapy.



FOLLOWED IN COUNCIL



In Liv Hospital Chronic Patient Consultation Clinic, patients with chronic health problems are evaluated by a council consisting of experienced and experienced psychiatry, oncology, hematology, rheumatology, algology, surgery and internal medicine specialists, and comprehensive and personalized care is provided in cooperation with the relevant physicians. In clinic, a treatment to enhance the patient's quality of life is planned with chairmanship of psychiatry specialist. This clinic consists of Various programs such as council evaluation, medical support planning, individual psychological counseling, supportive therapy groups, experience sharing groups, family and couple counseling, and art therapy.

ART THERAPY

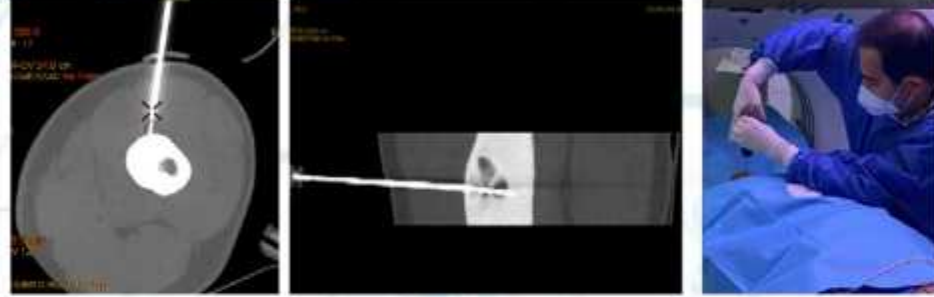
This provides services to patient with chronic diseases particularly oncology, together with Ebru artist and psychological counselor Ebru Uygun.



MEDICAL DEPARTMENTS

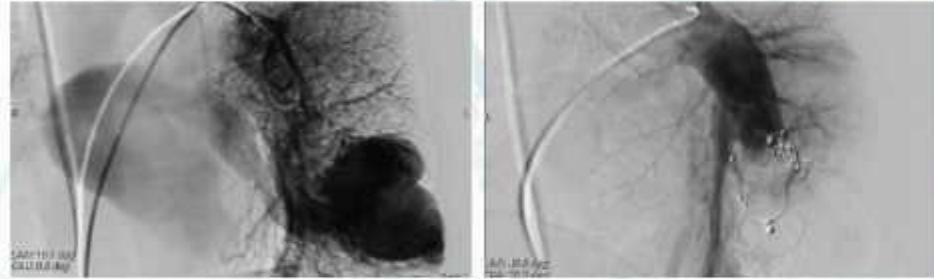
RADIOLOGY ULUS

Liv Hospital Ulus Radiology Clinic, equipped with next generation technological devices, provides healthcare services with multidisciplinary approach together with its specialist physician team and physicians from different disciplines.



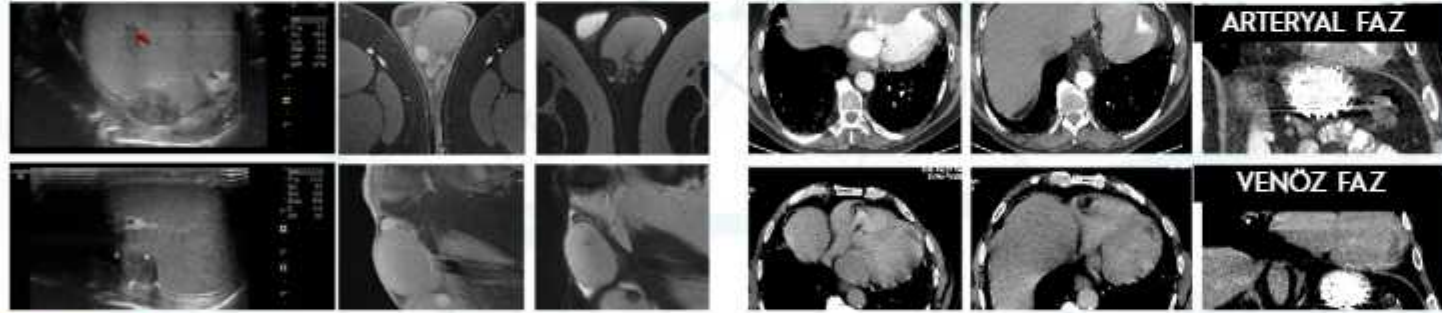
CASE - 1

A 29-year-old male patient with severe pain controlled with NSAID, which was more prominent at night, was diagnosed with osteoblastoma. CT-guided radiofrequency ablation therapy was applied. The patient returned to his country without symptoms.



CASE - 2

An 11-year-old female patient was diagnosed with pulmonary AVM with the complaint of dyspnea on exertion. In our clinic, giant complex pulmonary AVM embolization treatment was applied to the left lung lower lobe laterobasal segment.



CASE - 3

According to USG and MRI findings, extratesticular 1 cm diameter T2 hypointense, well-circumscribed paratesticular benign lesion showing prominent contrast increase in post-contrast series in the middle part of the left testis paramedial to the rete testis was interpreted in favor of fibrous pseudotumor. The pathology result was reported as a correlated benign adenomatoid tumor.



OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

- **Hüseyin Arkan**, Fetal MR Imaging, 3rd National Medical Imaging Techniques Education Congress, 12 November 2021

MEDICAL DEPARTMENTS

RADIOLOGY VADISTANBUL



MEDICAL DEPARTMENTS



PROCEDURES PERFORMED

CT - Computed Tomography	8%
Mammography	4%
MR - Magnetic Resonance	12%
Colored Doppler	3%
X-Ray	40%
USG - Ultrasound	29%
Bone Densitometry	2%
Interventional Procedures	1%



SYMPOSIUMS AND MEETINGS

- **Prof. Dr. Ayşe Aralaşmak**, Advanced Imaging Techniques in Brain Tumors, Current Approach to Central Nervous System Tumors, Liv Hospital Vadiistanbul, 1 November 2021.
- **Prof. Dr. Ayşe Aralaşmak**, Case Presentation, Panelist, Current Approach to Axilla in Patients with Breast Cancer, Liv Hospital Vadiistanbul, 25 September 2021.
- **Öğr Gör Tuğba İlkem Kurtoglu Ozcaglayan**, Case Presentation, Panelist, Current Approach to Axilla in Patients with Breast Cancer, Liv Hospital Vadiistanbul, 25 September 2021.

MEDICAL DEPARTMENTS

UROLOGY ULUS

In Liv Hospital Ulus Urology Clinic, high technology and Services are offered using modern medical practices.

ROBOTIC SURGERY IN UROLOGY

All urological surgeries performed with robotic surgery

- Radical prostatectomy
- Radical / partial nephrectomy
- Radical cystectomy
- Pyeloplasty / pyelolithotomy
- Adrenalectomy
- Retroperitoneal lymphadenectomy (RPLND)
- Simple prostatectomy
- Sacrocolpopexy
- Vesicovaginal fistula (VVF) repair
- Intracorporeal artificial bladder
- Intracorporeal ileal loop
- Ureteral reimplantation
- Nephroureterectomy & bladder cuff excision

CALCULUS SURGERY

1- Flexible Ureterorenoscopy



2- Digital Flexible Ureterorenoscopy



3- Percutaneous Kidney Calculus Surgery



CASE

Robotic pyeloplasty - The patient who had right hydronephrosis and right distal ureter dilatation due to right UPJ stenosis first had urethrosopic balloon dilatation applied. Then right robotic pyeloplasty operation was performed.



ROBOTIC RADICAL PROSTATECTOMY



MR/ULTRASOUND FUSION BIOPSY IN DIAGNOSIS OF PROSTATE CANCER

Areas with suspected cancer identified in MR images by MR Ultrasound Fusion are sampled by targeted biopsies and the need for second and third biopsies is largely eliminated.

OCCUPATIONAL AND SCIENTIFIC ACTIVITIES

Prof. Dr. Orhan Tanrıverdi

- Robotic Radical Prostatectomy in Prostate Cancer Treatment - Şişli Etfal Hospital Urology Clinic Training Seminar, November 2021

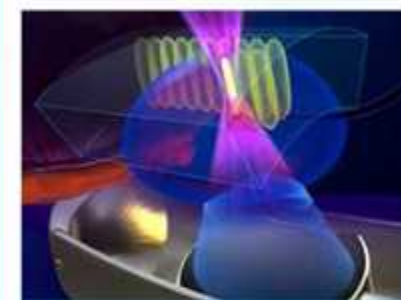
MEDICAL DEPARTMENTS

UROLOGY VADISTANBUL

In Liv Hospital Vadistanbul Urology Clinic, the diagnosis and treatment of urological diseases are carried out successfully with latest technological equipment. We provide services with physicians experienced in minimally invasive treatment of urological cancers (Robotic and laparoscopic surgery), surgical treatment of benign prostatic hyperplasia with laser and andrology. endourological surgical treatments of urinary system stone disease and urological reconstructive surgeries are also successfully performed.

TECHNOLOGY-INTEGRATED APPROACHES IN THE DIAGNOSIS AND TREATMENT OF PROSTATE CANCER

- 1) Multiparametric MR
- 2) Resum
- 3) Prostate Fusion Biopsy
- 4) Focal Treatments
 - a) Nanoknife
 - b) HIFU
- 5) Robotic surgery



METHODS USED IN THE FOCAL TREATMENT OF PROSTATE CANCER

1) HIFU (High Intensity Focused Ultrasound)

In Liv Hospital Urology Clinic, HIFU is applied as the primary treatment approach in localized prostate cancer, that is, at the stage where the entire cancer is in the prostate tissue and the surrounding tissues are intact.

2) Nanoknife (Irreversible Electroporation)

Nanoknife, which is a procedure performed with electric current, is successfully used in low-risk and intermediate-risk prostate cancer patients. The treatment is performed by applying electricity to the cancerous areas of the prostate during the procedure. Only the cancerous cells are eliminated without removing the entire prostate gland.

Resum

The prostate is reduced with water vapor energy. Prostate tissue, which has grown and compressed the urinary canal, is destroyed by using special water vapor created with radiofrequency energy.

Thulium Fiber Laser

Thulium fiber laser prostate enucleation (ThuFLEP) is used in benign prostatic hyperplasia and laser lithotripsy is used in urinary tract stone disease.

Urooncology Case Meetings

Urooncology Case Meetings are held every month on a multidisciplinary basis at Liv Hospital Vadistanbul Urology Clinic.

OCCUPATIONAL AND ACADEMIC ACTIVITIES

Prof. Dr. Volkan Tuğcu

- Pelvic Floor, Oncological, Functional and Reconstructive Live Surgery Symposium
- National Turkish Urology and Eurasian Urooncology Congresses - Speeches and Papers
- 30th National Urology Congress, Spokesperson
- 11th Eurasian Urooncology Congress, Şanlıurfa - 3 - 5th September



MEDICAL DEPARTMENTS

LIV HOSPITAL HOME CARE ULUS - VADISTANBUL

At Liv Hospital Home Health, solutions are produced for the needs of health and special care services. The privileged services of Liv Hospital are being taken home. The health team, consisting of specialist doctors and nurses and allied health personnel, offers special health and care services to patients who want to continue their treatment at home, those who need care, the physically disabled and those in similar situations.

"We visited thousands of homes safely in 2021"

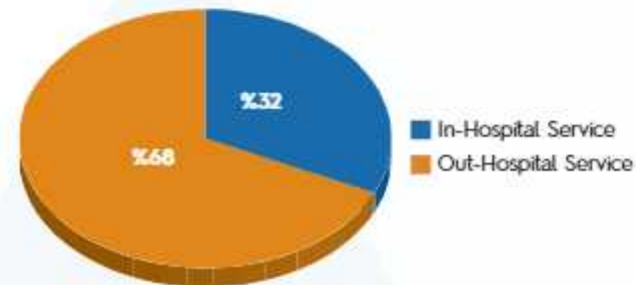
7 /24 HOURS UNINTERRUPTED SERVICE

Providing uninterrupted health services 24 hours a day, 7 days a week, Liv Hospital Home Health Team offers solutions for nursing and doctor needs as well as supportive treatments such as home physiotherapy, IV therapy and ozone therapy.

HOME CARE SERVICES

- Home Care Services 7/24
- Doctor examination services from all branches at home
- Nursing services at home
- Newborn baby breastfeeding nurse
- Physiotherapy session at home
- Auxiliary health personnel at home
- Our Check Up Services at home
- Cardiology
- Internal Medicine
- Urology
- Chest Diseases
- Home imaging services
- ECHO
- Lung USG
- Direct radiography
- Newborn baby nurse - Breastfeeding etc. educational nursing
- Medical device purchase / rental

Service Rates in 2021

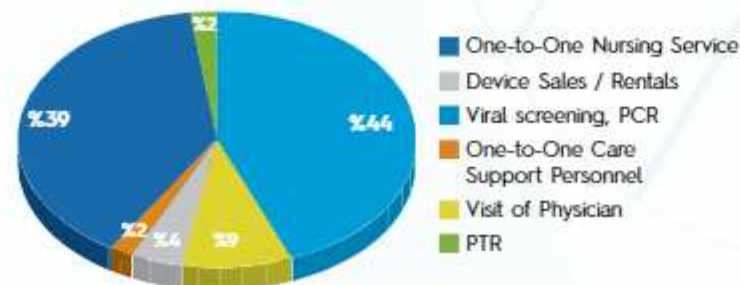


HOME CHECK UP SERVICE

Liv Hospital Home Health provides check-up service at home to increase the quality of life and early detection of diseases with its expert staff and experienced health personnel. Personalized therapy treatments are also provided for those who want to.



Services Provided in 2021



Liv Hospital

Annual Report 2021

**SCIENTIFIC
EVENTS**

SCIENTIFIC EVENTS

Liv Hospital Nation Physicians have carried out a total of 65 symposiums since 2014.



BABY AT RISK: CEREBRAL PALSY - JANUARY 23

Riskli Bebek Serebral Palsi

Semineri düzenleyen ve moderatör: Prof. Dr. Gülşen KÖSE

Riskli yenidoğan kimdir? (09.00 - 09.30)
Prof. Dr. Nermin TANSUĞ

Serebral Palsi Nasıl Tanınır? (09.30 - 10.00)
Prof. Dr. Gülşen KÖSE

Beslenme ve Nutru Problemleri (10.00 - 10.30)
Prof. Dr. Makbule EREN

Dişlenme (10.30 - 10.45)
Doç. Dr. Hülya ŞIRZAI

Fizik Tedavi ve Rehabilitasyon (10.45 - 11.15)
Doç. Dr. Hülya ŞIRZAI

Tedavide Çocuk Cerrahisi Rolü (11.45 - 12.15)
Prof. Dr. Selami SÖZÜBİR

Tedavide Ortopedik Yaklaşım (12.15 - 12.45)
Prof. Dr. Çağatay ÖZTÜRK

Serebral Palsi Tedavi Planı ve Prognoz (12.45 - 13.20)
Prof. Dr. Gülşen KÖSE

Tarih: 23 Ocak 2021

Katılmak için:
<http://risklibebeksp.com.tr/tv>
#liv LN2021



SCIENTIFIC EVENTS

STEM CELL AND TISSUE ENGINEERING SYMPOSIUM - 27/28 FEBRUARY

İSTİNYE ÜNİVERSİTESİ
Kök Hücre ve Doku Mühendisliği Sempozyumu
27-28 Şubat 2021

Sempozyum Başkanı:
Prof. Dr. Erdal Karaöz

Sekreteryası:
Dr. Hakan Danacı
hkan.danaci@istinye.edu.tr
Dr. Özgür Tataroğlu
ozgur.tataroglu@istinye.edu.tr
Dr. Tolga Akkoç
akkoc.tolga7@gmail.com

İSTİNYE ÜNİVERSİTESİ
Kök Hücre ve Doku Mühendisliği Sempozyumu
27-28 Şubat 2021

WORKSHOP-2 / DOKU MÜHENDİSLİĞİ VE 3D BIOPRINTING
28.02.2021 / 20:15 - 21:15

Dr. Hakan Danacı
Dr. Ayşe Batı Özlük

3D Bioprinting nedir?
GelMA'dan biyink yapımı
Biyinkler nasıl hazırlanıyor
Hücreleri hazırlama ve biyinklere yükleme
3D Bioprinter ayarları
3D Baskı I (GelMA)
3B ortamda hücre inceleme

3D Baskı II (HD Bioprint)
Çapraz bağlama
Post-printing süreci
Live/Dead Assay
Presto Blue boyama
DAPI/Aktin boyama
Kök hücrelerin 3D'de kullanımı

ONLINE ÇALIŞTAY PROGRAMI

• Çalıştay, katılımcıların 3 Boyutlu Doku Mühendisliği konusundaki temel bilgileri takip etmelerine, 3D Biyoyazıcılar ile biyoyazıcıların nasıl yapıldığını öğrenmelerine olanak sağlayacaktır.
• Çalıştaydaki sunumlar canlı olarak gerçekleştirilecek olup, uygulamaları izleyen katılımcıların videolar aracılığıyla aktarılacaktır.
• Katılımcılar sunumları sırasında veya son bölümde merak ettikleri yerleri sorabilirler, yapıldıkları problemler ile ilgili fikir alışverişleri veya ortak projeler geliştirilebilir.

www.istinyekokhucres.org

CURRENT TREATMENT APPROACHES IN KERATOCONUS - APRIL 16

KERATOKONUSTA GÜNCEL TEDAVİ YAKLAŞIMLARI

MODERATÖR:
• Prof. Dr. Ömer Faruk Yılmaz

KONUŞMACILAR:
• Klinik Tanı, Ayırıcı Tanı-Epidemiyoloji:
Doç. Dr. Yusuf Yıldırım
• Crosslinking Tedavisi ve Güncel Uygulamaları:
Doç. Dr. Canan Adıgüzel
• Wavefront Topoguided Laser:
Doç. Dr. Koray Budak
• Crosslinking-PTK:
Prof. Dr. Vedat Kaya
• Intrakorneal Ring:
Doç. Dr. Efehan Coşkunseven

TOPLANTI TARİHİ: 16 NİSAN 2021 CUMA

SCIENTIFIC EVENTS

SCIENTIFIC MEETINGS AND FAMILY WORKSHOPS IN COOPERATION WITH BOSTON CHILD & LIV HOSPITAL - 7/10 SEPTEMBER

Innovations in Pediatric Diseases-I
September 7, 2021 18.00 - 20.30
Free Registration LIVE BROADCAST → www.onlinemeeting.tv

Chair Person
Tülin Tıraş Celkan
Liv Hospital, İstanbul University

Chair Person
Tunç Fıgıncı
Medical Park Hospital

New Approaches in Cellular Therapy-CAR-T Treatment
Leslie Lehmann
Boston Children's Hospital, Harvard Medical University

Gene Therapy for Hematologic Oncologic Disorders
Christine Duncan
Boston Children's Hospital, Harvard Medical University

Approach to Hemangiomas and Vascular Malformations
Gül Nihal Özdemir
Liv Hospital, İstanbul University

For program details: www.livsposium.com

Innovations in Pediatric Diseases-II
September 8, 2021 18.00 - 20.30
Free Registration LIVE BROADCAST → www.onlinemeeting.tv

Chair Person
Sertaç Çiçek
Liv Hospital, İstanbul University

Chair Person
Levent Saitık
Liv Hospital, İstanbul University

Congenital Cardiac Surgery: Innovations
Aditya "AK" Kaza
Boston Children's Hospital, Harvard Medical University

Single Ventricle/Hypoplastic Left Heart Syndrome and its Variants: Present and Future Medical and Surgical Management
Sitaram Emani
Boston Children's Hospital, Harvard Medical University

Surgery for Anomalous Aortic Origin of Coronary Arteries: Indications and Surgical Techniques
Sertaç Çiçek
Liv Hospital, İstanbul University

For program details: www.livsposium.com

Innovations in Pediatric Diseases-III
September 9, 2021 18.00 - 20.30
Free Registration LIVE BROADCAST → www.onlinemeeting.tv

Chair Person
Rezan Topaloğlu
Hacettepe University

Chair Person
Cengiz Kara
Liv Hospital, İstanbul University

Advances in Osteogenesis Imperfecta
Christina Jacobsen
Boston Children's Hospital, Harvard Medical University

Precision Medicine in Childhood Chronic Kidney Disease
Friedhelm Hildebrandt
Boston Children's Hospital, Harvard Medical University

Approach to the Child with a Urinary Tract Stone
Ozan Özkaya
Liv Hospital, İstanbul University

For program details: www.livsposium.com

Innovations in Pediatric Diseases-IV
September 10, 2021 18.00 - 20.30
Free Registration LIVE BROADCAST → www.onlinemeeting.tv

Chair Person
Gülşen Köse
Liv Hospital, İstanbul University

Chair Person
Fügen Çullu Çokuğraş
İstanbul University

Advances in Tuberos Sclerosis Complex
Mustafa Şahin
Boston Children's Hospital, Harvard Medical University

Advances in Cystic Fibrosis Treatment
Sabina Sabharwal
Boston Children's Hospital, Harvard Medical University

Approach to Congenital Diarrheal Disorders
Makbule Eren
Liv Hospital, İstanbul University

For program details: www.livsposium.com

SCIENTIFIC EVENTS

PELVIC BASE ONCOLOGICAL, FUNCTIONAL AND RECONSTRUCTIVE LIVE SURGERY SYMPOSIUM - SEPTEMBER 18

ONLINE
PELVİK TABAN ONKOLOJİK, FONKSİYONEL ve REKONSTRÜKTİF CANLI CERRAHİ SEMPOZYUMU
18 Eylül 2021- Cumartesi
Liv Hospital Vadi İstanbul, İstanbul / Türkiye

cerrahi
www.cerrahi.tv

liv HOSPITAL



INTRAOCULAR LENSES IN PRESBIOPIA - SEPTEMBER 24

liv HOSPITAL

PRESBİYOPI DE GÖZ İÇİ LENSLE

23 Eylül Perşembe
Saat: 19:00-20:30

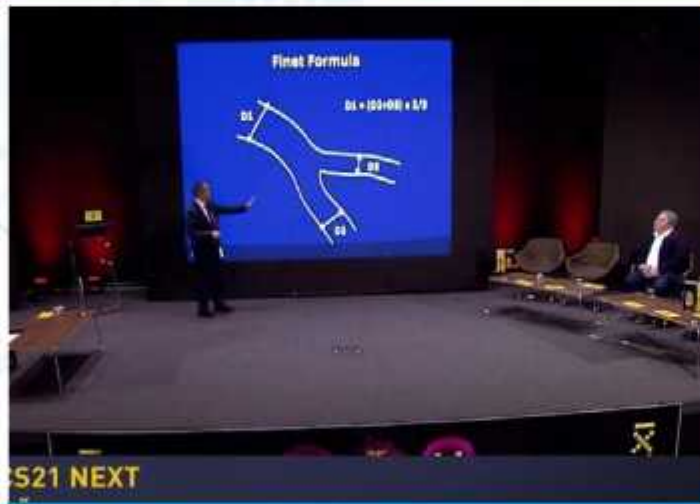
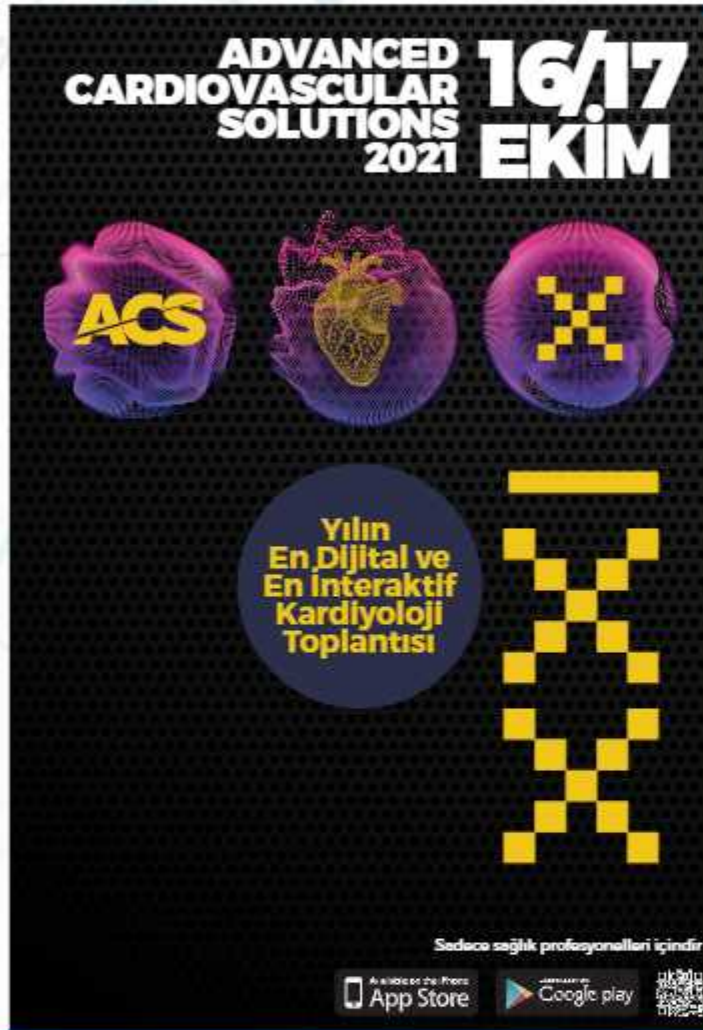
Liv Hospital Ulus
B1 Hakan Oruçkaptan Salonu

Program için kayıtlarınız →



SCIENTIFIC EVENTS

ACS (INTERNATIONAL ADVANCED CARDIOVASCULAR SOLUTIONS) 2021 - OCTOBER 16/17



SCIENTIFIC EVENTS

SCIENTIFIC MEETING OF OTOLARYNGOLOGISTS - OCTOBER 21

SCIENTIFIC EVENTS

CURRENT APPROACH TO CENTRAL NERVOUS SYSTEM TUMORS - NOVEMBER 1

**MERKEZİ SİNİR SİSTEMİ
TÜMÖRLERİNE GÜNCEL YAKLAŞIM**

AÇILIŞ KONUŞMALARI:
Meri İbrolu
(Liv Hospital Grup Koordinatörü)
Op. Dr. Adil Tanık
(Liv Hospital Vadi İstanbul Başhekim)
Prof. Dr. Nuriye Gazioğlu
(Liv Hospital Vadi İstanbul Beyin ve
Sinir Cerrahisi Uzmanı)

OTURUM BAŞKANI:
Prof. Dr. Merdan Fayda
Prof. Dr. Özge Minaracı

KAHVE ARASI:
14.05-14.25

OTURUM BAŞKANI:
Prof. Dr. Cüdem Usul Afsar
Prof. Dr. Ayhan Öztürk

14.25-14.55:
Beyin Tümörlerinde
İleri Görüntüleme Teknikleri
Prof. Dr. Ayşe Arslançak

14.55-15.25:
Beyin Tümörü Cerrahisinde
Nöromonitörizasyon
Prof. Dr. Burcu Ömerci

15.25-15.45:
Uyankı Kriyotomi
Prof. Dr. İlhan Elmacı

15.45-16.05:
Limik ve Parafimik Tümörler
Prof. Dr. Tufan Hıncalmez

16.05-16.25:
Kraniofaryngeal Cerrahisinde
Değişen Paradigmalar
Prof. Dr. Nuriye Gazioğlu

16.25-17.00:
Tartışma ve Kapanış

TARİH: 1 KASIM 2021 PAZARTESİ SAATİ: 12.30-17.00
**YER: LIV HOSPITAL VADİ İSTANBUL
KONFERANS SALONU 1. KAT**

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HOSPITAL

livhospital.com
444 4 548



SCIENTIFIC EVENTS

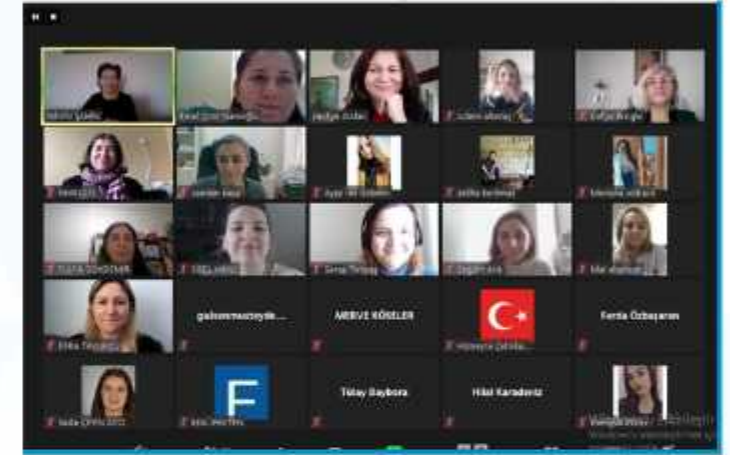
MLP CARE BIOCHEMISTRY SPECIALISTS MEETING



PATIENT CARE SERVICES

PATIENT CARE SERVICES & WOMEN'S HEALTH NURSING ASSOCIATION SYMPOSIUM - JANUARY 29

The "Covid-19 Pandemic and Women's Health Symposium" was held on January 29, in cooperation with the Liv Hospital HBH team and the Women's Health Nursing Association.



LIV HOSPITAL HBH NURSING WEEK SYMPOSIUM - MAY 4

The symposium on "Nursing in the World: Covid-19 Diaries" was held on May 4 as part of Nursing Week. Speakers from Germany, England, America and Turkey shared their professional knowledge and experiences during the Covid-19 period. 197 people attended the event, which attracted great internal and external interest.



Liv Hospital
Annual Report

PATIENT CARE SERVICES

PATIENT CARE SERVICES

NURSING WEEK CELEBRATION - MAY 11

As every year during the nursing week, the tradition did not change this year and this special day was celebrated with the administrators.



CHILD HEMATOLOGY ONCOLOGY CARE COURSE - MAY 29

The Pediatric Hematology Oncology Care Course was held on May 29, with the participation of distinguished physicians and nurses as speakers, with a live broadcast from the pediatrics TV website. 393 people participated in the broadcast.



PATIENT CARE SERVICES

PATIENT CARE SERVICES ANESTHESIA TECHNICIANS SYMPOSIUM - MAY 22

Liv Hospital Ulus Patient Care Services "Anesthesia Technicians Symposium" was organized on 22 May. Liv Hospital Physicians and Anesthesia Technician Responsibles shared their knowledge and experience with the Anesthesia Society.



STEP BY STEP IMAGING TECHNIQUES SYMPOSIUM - JULY 26

The symposium on "Step by Step Imaging Techniques" was organized on July 26 in partnership with Işinye University. 353 people attended.



PATIENT CARE SERVICES

PRIZE FOR AT ENERGY SAVING PROJECT

Receiving the first prize in the energy saving project celebration was held.

II. INTERNATIONAL PEDIATRICS AND GYNECOLOGY CONGRESS

At the congress held between 21-24 October "Establishment of Pediatrics Unit in Private Hospital" Participated with a poster.



BREAST CANCER AWARENESS MONTH INTERVIEW

In October, which is breast cancer awareness month, live broadcast speeches and events were organized.



SYMPOSIUM WITH HALIC UNIVERSITY

A Symposium on "From Mentor to Intern, students meet with Liv Hospital" was organized with Haliç University.

PATIENT CARE SERVICES

ORIENTATION AND GENERAL EDUCATIONAL ACTIVITIES

Liv Hospital Ulus and Vadistanbul Patient Care Services has been organized many orientation and training activities during 2021.



CORPORATE EVENTS

KIDS THE WORLD'S GUARDIAN SUPERHEROES - JUNE 4



AUCTION EVENT FOR THE BENEFIT OF GAZI WIVES - JUNE 7



Liv Hospital

Annual Report 2021

**CORPORATE
EVENTS**

CORPORATE EVENTS

"CANCER AND NUTRITION" INTERVIEW - 9 JUNE



"THERE IS ALWAYS A HOPE " PAINTING EXHIBITION - JUNE 16



CORPORATE EVENTS

FATHER'S DAY EVENT - 19 JUNE



LIFE IS THE MIRACLE'S ITSELF LAUNCH - JULY 1, 2021



CORPORATE EVENTS

DUCHENNE MUSCULAR DYSTROPHY AWARENESS DAY - SEPTEMBER 6



FAMILY WORKSHOPS IN COOPERATION WITH LIV HOSPITAL & BOSTON CHILD - 7/10 SEPTEMBER



CORPORATE EVENTS

FEEL THE RHYTHM OF LIFE WITH YOUR HEART - SEPTEMBER 15



TERRACE CHATS - THINGS TO KNOW ABOUT THE DIGITAL SYSTEM



CORPORATE EVENTS

ART THERAPY WITH EBRU - SEPTEMBER 18, 2021



PARILTİ KIDS FESTIVAL - SEPTEMBER 25



CORPORATE EVENTS

SUPPORT DEPARTMENTS' EFFECT ON PATIENT SATISFACTION - OCTOBER 9



CURRENT APPROACHES IN BREAST CANCER - OCTOBER 12



CORPORATE EVENTS

TOUCH - FEEL - NOTICE WITH KAĞITHANE MUNICIPALITY - OCTOBER 22



TOUCH - FEEL - NOTICE - PEDALS RETURN FOR LIFE - OCTOBER 23



CORPORATE EVENTS

ECONOMY OF THE BRAIN IS HEALTH WITH "TÜGIAD" - NOVEMBER 23



LIFE IS A BREATH - 1 DECEMBER



As Liv Hospital, which continues its existence with our motto "The Future of Health" and the excitement of the first day of our establishment, we answer all the questions that our esteemed guests wonder with our Health Schools. We share the experiences of specialist physicians and health professionals as speakers or guests with our guests and create awareness.

2- THE POWER OF EXERCISE IN THE TREATMENT OF FIBROMYALGIA





Ücretsizdir

FİBROMİYALİ TEDAVİSİNDE EGZERSİZİN GÜCÜ

Kronik ağrıların azaltılak, yaşam kalitesi geliştirilmek için zaman kaybetmeden aktif hareketi, hareketi öğrenmek yeterlidir.

terasta hareket var

Workshop Programı

- Fibromiyalji, Egzersiz Yaratıcı
- Tai Chi
- Mat Pilates
- Zumba & Dans
- Sulu ortam egzersizleri
- Akademi egzersizleri
- Meditasyon egzersizleri
- Enerji koruma becerileri
- Yoga & Gece egzersizleri



Prof. Dr. Berna Tuncel ve
Uzm. Fyottergül
Bağcı O-Ünç Güçtür
şahinler

24 Haziran ve
7-8-15 Temmuz 2021
Saat: 16.30-17.30

Dr. İsmail Yılmazlar
Araştırma Uzm. Dr. Berna Tuncel
& Doç. Dr. Fyottergül
Bağcı O-Ünç Güçtür
şahinler

HEALTH SCHOOLS

3- PREGNANT YOGA AND PILATES STAY IN MOVE

HAMİLE YOGASI VE PILATESİYLE HAREKETTE KALINI!

Hamilelik sürecinde kendini desteklemek, doğum için fiziksel hazırlanmak ve doğum sonrası iyileşmek için hamile yoga ve pilates yapmanın faydaları çoktur.

Workshop Programı

- Gebelik egzersizleri öğretmek
- Her trimester için egzersiz
- Güven egzersizleri
- Germe egzersizleri
- Pelvik taban egzersizleri
- Solunum ve gevşeme egzersizleri
- Hamilelik yoga
- Loğusluk dönemi egzersizleri
- Mat ile pratik

Prof. Dr. Berna Tander ve Uzman Fizyoterapist Murat Altıntaş eşliğinde

23-30 Haziran 2021 ve 7-14 Temmuz
Saat: 10.00-11.00

Ücretsizdir

#terasta hareket var

4- IMPROVE YOUR POSTURE IMPROVE YOUR QUALITY OF LIFE

DURUŞUNU DÜZELT YAŞAM KALİTENİ YÜKSELT

Günlük yaşam programında kolaylıkla uygulanabilecek egzersizlerle omurga sağlığını koruyarak, destek olunuz.

Workshop Programı

- Germe egzersizleri
- Postür egzersizleri
- Omurga stabilizasyon egzersizleri
- Kuvvetlendirme egzersizleri
- Kulaç ve kulaç, gün içinde sıkça yapılacak egzersizler
- Sonuçta daha rahat yürüyecek egzersizler

Prof. Dr. Berna Tander ve Uzman Fizyoterapist, Osteoçen Koşukları eşliğinde

22-29 Haziran 2021 ve 6-13 Temmuz 2021
Saat: 16.30-17.30

Ücretsizdir

#terasta hareket var

7- PARENT SCHOOL

SAĞLIKLI ÇOCUKLAR İÇİN TEMEL EBEVEYNLİK BECERİLERİ

Çocuk gelişim süreçleri ve becerileri ve ailelerin bu süreçleri nasıl yönettiği, ailelerin çocukların gelişim süreçlerini nasıl yönettiği, ailelerin çocukların gelişim süreçlerini nasıl yönettiği, ailelerin çocukların gelişim süreçlerini nasıl yönettiği.

Eğitim Programı

- Çocukların öğrenme süreçleri, becerileri, davranışları ve ailelerin rolü
- Doğum sonrası ilk ayların (0-12 ay) değerlendirilmesi
- Doğum sonrası ilk ayların (12-24 ay) değerlendirilmesi
- Çocukların gelişim süreçleri ve ailelerin rolü
- Çocukların gelişim süreçleri ve ailelerin rolü
- Çocukların gelişim süreçleri ve ailelerin rolü

Prof. Dr. Berna Tander ve Uzman Fizyoterapist, Osteoçen Koşukları eşliğinde

23-30 Haziran 2021 ve 7-14 Temmuz 2021
Saat: 10.00-11.00

Ücretsizdir

8- NUTRITIONAL SCHOOL

Liv Hospital Beslenme Okulu

Doğru beslenerek hastalıklardan korunmak mümkün mü?

Sağlıklı beslenme nasıl olur?

Kronik hastalığın var mıdır, önlenmesi için ne yapılabilir?

Sağlıklı beslenerek nasıl kalabilir?

Doğru beslenerek hastalıklardan korunmak mümkün mü?

Sağlıklı beslenme nasıl olur?

Kronik hastalığın var mıdır, önlenmesi için ne yapılabilir?

Sağlıklı beslenerek nasıl kalabilir?

Prof. Dr. Berna Tander ve Uzman Fizyoterapist, Osteoçen Koşukları eşliğinde

23-30 Haziran 2021 ve 7-14 Temmuz 2021
Saat: 10.00-11.00

Ücretsizdir

5- CANCER SUPPORT GROUP

LIV HOSPITAL KANSER DESTEK GRUBU

"Bu süreçte yalnız değilsiniz"

Hastalık sürecinde destek grubunuzla hastalığınızla ilgili deneyimlerinizi paylaşarak, hastalığınızla ilgili deneyimlerinizi paylaşarak, hastalığınızla ilgili deneyimlerinizi paylaşarak.

Prof. Dr. Berna Tander ve Uzman Fizyoterapist, Osteoçen Koşukları eşliğinde

23-30 Haziran 2021 ve 7-14 Temmuz 2021
Saat: 10.00-11.00

Ücretsizdir

6- MOTHER QUEENS CLUB BIRTH PREPARATION COURSE

Ana Kraliçler Kulübü DOĞUMA HAZIRLIK KURSU

BEBEĞİNİZİN DOĞUMUNA ve ANNE-BABA OLMAYA HAZIR MISINIZ?

TARİH: 15 Haziran 2021 Salı ve 30 Haziran 2021 Çarşamba

Prof. Dr. Berna Tander ve Uzman Fizyoterapist, Osteoçen Koşukları eşliğinde

23-30 Haziran 2021 ve 7-14 Temmuz 2021
Saat: 10.00-11.00

Ücretsizdir

10

Liv Hospital

Annual Report 2021

SCIENTIFIC PUBLICATIONS

SCIENTIFIC PUBLICATIONS

Liv Hospital Physicians have carried out a total of 899 publications since 2013.



- 1- **Ayaslı A1**, Ozturk A2 : A Rare Disease in the Differential Diagnosis of Multiple Sclerosis (MS): Granulomatosis with Polyangitis (GPA) (Wegener Granulomatosis) Journal of Dokuz Eylül Uni Med Fac 2021 35;18(3).
- 2- Boyraz RK, Kirpınar I, Yılmaz O, Özyurt O, Kiliçarslan T, **Aralasmak A**. A Treatment-Response Comparison Study of Resting-State Functional Magnetic Resonance Imaging Between Standard Treatment of SSRI and Standard Treatment of SSRI Plus Non-dominant Hand-Writing Task in Patients With Major Depressive Disorder. Front Psychiatry. 2021 Sep 3;12:698954. doi: 10.3389/fpsyt.2021.698954. eCollection 2021.
- 3- Akyüz A, **Özçağlayan TİK**, Şahin GG, Efe MM, Gür DÖ, Alpsoy Ş. Some inflammatory markers and chest computerized tomography in patients with severe acute respiratory syndrome coronavirus infection. Rev Assoc Med Bras (1992). 2021 Apr;67(4):522-528.
- 4- Altunhan B, Gundogdu AA, **Ozcaglayan TIK**, Unal A, Turgut N. The effect of pelvic floor exercise program on incontinence and sexual dysfunction in multiple sclerosis patients. Int Urol Nephrol. 2021 Jun;53(6):1059-1065.
- 5- Gunaydin B, **Kurtoglu Ozcaglayan TI**, Cetin MU, Sari A, Dincel YM, Tekin C. Does anterolateral ligament injury change the treatment option in patients with partial ACL tears? Acta Orthop Belg. 2021 Jun;87(2):366-373.PMID: 34529394
- 6- Kadirogullari P, **Seckin KD**, Yalcin Bahat P, Aytufan Z. The effect of chewing gum on bowel function postoperatively in patients with total laparoscopic hysterectomy: a randomised controlled trial. J Obstet Gynaecol. 2021 Aug 11:1-6. doi:10.1080/01443615.2021.1941821.
- 7- Goksu M, Kadirogullari P, **Seckin KD**. Evaluation of depression and sleep disorders in the preoperative and postoperative period in stage 4 endometriosis patients. Eur J Obstet Gynecol Reprod Biol. 2021 Sep;264:254-258. doi:10.1016/j.ejogrb.2021.07.037. Epub 2021 Jul 24.
- 8- **Seçkin KD**, Kadirogullari P, Kiyak H, Doğan AR, Tapısız ÖL. The manchester procedure combined with laparoscopic sacrohysteropexy by retroperitoneal tunneling. J Turk Ger Gynecol Assoc. 2021 Jun 10. doi:10.4274/jtgga.galenos.2021.2021.0029.
- 9- Kadirogullari P, Yalcin Bahat P, Sahin B, Gonen I, **Seckin KD**. The Effect of Pethidine Analgesia on Labor Duration and Maternal-Fetal Outcomes. Kadirogullari. Acta Biomed. 2021 May 12;92(2):e2021065. doi: 10.23750/abm.v92i2.10905.
- 10- Vatansever D, Taskiran C, Mutlu Meydanli M, Gungorduk K, Akbayir O, Yalcin I, Demirkiran F, **Sozen H**, Ozgul N, Celik H, Onan MA, Taskin S, Oge T, Simsek T, Abboud S, Yuksel IT, Ayhan A. Impact of cytoreductive surgery on survival of patients with low-grade serous ovarian carcinoma: A multicentric study of Turkish Society of Gynecologic Oncology (TRSGO-OvCa-001). J Surg Oncol. 2021 May;123(8):1801-1810. doi: 10.1002/jso.26450. Epub 2021 Mar 3.
- 11- Onder S, Hurdogan O, Bayram A, Yilmaz I, **Sozen H**, Yavuz E. The role of FOXL2, SOX9, and β-catenin expression and DICER1 mutation in differentiating sex cord tumor with annular tubules from other sex cord tumors of the ovary. Virchows Arch. 2021 Aug;479(2):317-324. doi: 10.1007/s00428-021-03052-2. Epub 2021 Feb 10.
- 12- Is the extent of lymphadenectomy a prognostic factor in International Federation of Gynecology and Obstetrics stage II endometrioid endometrial cancer? Cuyulan ZF, Akilli H, Gungorduk K, Demirkiran F, Oz M, Salman MC, **Sozen H**, Celik H, Gokcu M, Bese T, Meydanli MM, Ozgul N, Topuz S, Kuscü E, Kuru O, Gokmen S, Gultekin M, Ayhan A. J Obstet Gynaecol Res. 2021 Mar;47(3):1134-1144. doi: 10.1111/jog.14648. Epub 2021 Jan 10.PMID: 33426779
- 13- 1. F Türker, A Oral, T Şahin, BÇ Türker, **E Koçak**, HE Ataoğlu, S Ahabab. Does the FT3-to-FT4 ratio easily predict the progression of NAFLD and NASH cirrhosis? Journal of International Medical Research 2021;49 (11).
- 14- 2. Sökmen BK, Şahin T, Oral A, **Kocak E**. Comparison of Biopsy, Computed Tomography and Magnetic Resonance Imaging in the Detection of Hepatosteatois in Live Liver Donor Candidates. Namık Kemal Tıp Dergisi 2021; 9 (2), 101-107.
- 15- 3. Fatih Türker, Alihan Oral, Tolga Sahin, Betül Cavusoglu Türker, **Erdem Kocak**, Hayriye Esra Ataoğlu, Suleyman Ahabab. Does the FT3-to-FT4 ratio easily predict the progression of NAFLD and NASH cirrhosis? Journal of International Medical Research 2021; 49(11) 1-7.
- 16- Nalcacioglu H, Tekcan D, Can Meydan B, **Ozkaya O**. Acute kidney injury in an adolescent, Peditr Nephrol. 2021 Feb;36(2):315-317.
- 17- Yılmaz B, **Ozkaya O**, Islek I. Nephrotic syndrome following hepatitis B vaccination: A 17-year follow-up. North clin Istanbul, 2021 Mar 5;8(2):196-198.

- 18- Prognostic evidence of LEF1 isoforms in childhood acute lymphoblastic leukemia. Erbilgin Y, Hatirnaz Ng O, Can I, Firtina S, Kucukcankurt F, Karaman S, Karakas Z, **Celkan TT**, Zengin E, Aylan Gelen S, Nihal Ozdemir G, Yildirmak Y, Dogru O, Tansel T, Khodzhaev K, Toluk O, Ozbek U, Sayitoglu M. *Int J Lab Hematol*. 2021 Oct;43(5):1093-1103.
- 19- Telemedicine Applications in a Tertiary Pediatric Hospital in Turkey During COVID-19 Pandemic. Aydemir S, Ocak S, Saygılı S, Hopurcuoğlu D, Haşlak F, Kiykim E, Aktuğlu Zeybek Ç, **Celkan TT**, Demirkan EB, Kasapçopur Ö, Çokuğraş H, Kiykim A, Canpolat N. *Telemed J E Health*. 2021 Oct;27(10):1180-1187.
- 20- A Peculiar Disease of a Young Woman who Wants to Get Pregnant. **Celkan TT**, Fenercioğlu Ş, Kaçar AG. *Turk J Haematol*. 2021 Sep 24. doi: 10.4274/tjh.galenos.2021.20191.
- 21- Neurofibromatosis type 1: Expanded variant spectrum with multiplex ligation-dependent probe amplification and genotype-phenotype correlation in 138 Turkish patients. Güneş N, Yeşil G, Geyik F, Kasap B, **Celkan TT**, Kebudi R, Tüysüz B. *Ann Hum Genet*. 2021 Sep;85(5):155-165.
- 22- Impact of having a sibling with cancer or type 1 diabetes mellitus on psychopathology and self-conscious emotions in adolescents: a comparative study including controls. Erdim NK, Koyuncu Z, Keleş H, Durcan G, Kadak MT, Doğançın B, **Celkan T**. *Support Care Cancer*. 2021 Aug 7. doi: 10.1007/s00520-021-06456-7.
- 23- Adverse COVID-19 outcomes in immune deficiencies: Inequality exists between subclasses. Karakoc Aydinler E, Bilgic Eltan S, Babayeva R, Aydinler O, Kepenekli E, Kolukisa B, Sefer AP, Yalcin Gungoren E, Karabiber E, Yucel EO, Ozdemir O, Kiykim A, Artac H, Yakici N, Yalcin K, Cokugras H, **Celkan TT**, Orhan F, Yesilipek MA, Baris S, Ozen A. *Allergy*. 2021 Jul 27;10.1111/all.15025. doi: 10.1111/all.15025.
- 24- Evolution and long-term outcomes of combined immunodeficiency due to CARMIL2 deficiency. Kolukisa B, Baser D, Akcam B, Danielson J, Bilgic Eltan S, Haliloglu Y, Sefer AP, Babayeva R, Akgun G, Charbonnier LM, Schmitz-Abe K, Kendir Demirkol Y, Zhang Y, Gonzaga-Jauregui C, Jimenez Heredia R, Kasap N, Kiykim A, Ozek Yucel E, Gok V, Unal E, Pac Kisaarslan A, Nepesov S, Baysoy G, Onal Z, Yesil G, **Celkan TT**, Cokugras H, Camcioglu Y, Eken A, Boztug K, Lo B, Karakoc-Aydiner E, Su HC, Ozen A, Chatila TA, Baris
- 25- Investigation of (epi)genotype causes and follow-up manifestations in the patients with classical and atypical phenotype of Beckwith-Wiedemann spectrum. Tüysüz B, Güneş N, Geyik F, Yeşil G, **Celkan TT**, Vural M. *Am J Med Genet A*. 2021 Jun;185(6):1721-1731.
- 26- Clinical course of pediatric large vascular anomalies located in the extremities. Oktay BK, Kaçar AG, Özel ŞÇ, Ocak S, **Celkan TT**. *Turk Arch Pediatr*. 2021 May 1;56(3):213-218.
- 27- Posterior Reversible Encephalopathy Syndrome in Childhood Hematological/Oncological Diseases: Multicenter Results. Bilir ÖA, Dikme G, Malbora B, Evim MS, Sivş ZÖ, Tüfekçi Ö, Bahadır A, Karaman S, Vural S, Bayhan T, Yarali HN, **Celkan TT**, Özbek NY. *J Pediatr Hematol Oncol*. 2021 May 1;43(4):e462-e465.
- 28- Comparison of outcomes of children with acute lymphoblastic leukemia treated with BMF protocol across 2 decades. Sunamak EÇ, Özdemir N, Koka A, Yantiri L, Apak H, **Celkan TT**. *Pediatr Hematol Oncol*. 2021 Mar;38(2):134-146.
- 29- Dabigatran etexilate for the treatment of acute venous thromboembolism in children (DIVERSITY): a randomised, controlled, open-label, phase 2b/3, non-inferiority trial. Halton J, Brandão LR, Luciani M, Bomgaars L, Chalmers E, Mitchell LG, Nurmeev I, Sharathkumar A, Svirin P, Gorbatiyov K, Tartakovsky I, Simetzberger M, Huang F, Sun Z, Kreuzer J, Gropper S, Reilly P, Brueckmann M, Albisetti M; DIVERSITY Trial Investigators. *Lancet Haematol*. 2021 Jan;8(1):e22-e33.
- 30- Kara Y, **Eren M**, Arslan S, Çilingir O. IL-15 gene polymorphism in celiac disease patients and their siblings. *Turk J Gastroenterol*. 2021; 32(4): 349-356.
- 31- Özdemir, Z.C, Düzenli Kar, Y., Bektaş P. C., **Eren, M.**, Bilgin, M., Bör, Ö. Hematological Parameters and Leukocyte Formulas in Predicting Celiac Disease in Children with Iron Deficiency Anemia. *Journal of Academic Research in Medicine*, 2021, 11(2), 187-191.
- 32- Nafiye Urgenci, Funda Ozgenc, Zarife Kuloğlu, Hasan Yüksekaya, Sinan Sarı, Tülay Erkan, Zerrin Önal, Gönül Çaltepe, Mustafa Akçam, Duran Arslan, Nur Arslan, Reha Artan, Ayşen Aydoğan, Necati Balamtekin, Maşallah Baran, Gökhan Baysoy, Murat Çakır, Buket Dalgıç, Yaşar Doğan, Özlem Durmaz, Çiğdem Ecevit, **Makbule Eren**, et al. Familial Mediterranean Fever Mutation Analysis in Pediatric Patients With Inflammatory Bowel Disease: A Multicenter Study. *Turk J Gastroenterol* 2021; 32: 248-260 (DOI: 10.5152/tjg.2021.20057)
- 33- Gastroenterolojide ve Hepatolojide Kullanılan Tanı Testleri. **Makbule Eren**, Çiğdem Arıkan. *Merve Usta. Çocuk Gastroenteroloji, Hepatoloji ve Beslenme Derneği Rehberleri*
- 34- **Gül Nihal Özdemir**. Çocuklarda Miyelodisplastik Sendrom Myelodysplastic Syndrome in Children. *Sağlık Bilimlerinde İleri Araştırmalar Dergisi* 2021, Cilt 4, Sayı 2. DOI: 10.26650/JARHS2021-700825
- 35- Sunamak EÇ, **Özdemir N**, Koka A, Yantiri L, Apak H, **Celkan TT**. Comparison of outcomes of children with acute lymphoblastic leukemia treated with BMF protocol across 2 decades. *Pediatr Hematol Oncol*. 2021 Mar;38(2):134-146.

- 36- Aycicek A, Pasli Uysalol E, Tahtakesen TN, **Ozdemir GN**, Akici F, Bayram C. Flow Cytometry-based Absolute Blast Count on Day 8: Reliable, Fast, and Inexpensive Method. *J Pediatr Hematol Oncol*. 2021 Jan;43(1):33.
- 37- Kılıç MA, **Özdemir GN**, Tahtakesen TN, Uysalol EP, Bayram C, Ayçiçek A, Aydoğan G. Glucose 6 phosphate dehydrogenase deficiency: A single-center experience. *Turk Arch Pediatr*. 2021 May 1;56(3):245-248.
- 38- Kılıç MA, **Özdemir GN**, Tahtakesen TN, Gökçe M, Uysalol EP, Bayram C, Ayçiçek A, Aydoğan G. Clinical Features and Outcome of Children With Hereditary Spherocytosis. *J Pediatr Hematol Oncol*. 2021 May 31
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MULTIDISCIPLINARY PHYSICIAN MEETINGS

Liv Hospital Vadistanbul decides in the diagnosis and treatment of many diseases with councils formed by experienced and specialist physicians from various disciplines. The most suitable treatment protocols are considered with the most contemporary approaches and determined according to the decision taken by the council participated by doctors specialized in their area.



PHYSICIAN CONFERENCES 2021 PHYSICIAN MEETINGS (75)

COUNCILS

ONCOLOGY COUNCIL

Radiology, Radiation Oncology, Medical Oncology, Nuclear Medicine, Algology, Pathology, General Surgery, Obstetrics, Urology, Ear Nose Throat Surgery, Chest Diseases, Chest Specialist from Surgery, Gastroenterology, Orthopedics clinics with the participation of physicians.

HEART HEALTH COUNCIL

Formed by the participation of Cardiology, Cardiovascular Surgery, Intensive Care departments.

BREAST COUNCIL

Formed by the participation of General Surgery, Radiology, Pathology, Medical Oncology, Radiation Oncology, Nuclear Medicine departments.

PEDIATRIC ONCOLOGY COUNCIL

Formed by the participation of specialist physicians from Pediatric Surgery, Brain Surgery, Otorhinolaryngology, Ophthalmology, Nuclear Medicine, Radiology, Pediatric Hematology and Oncology, General Pediatrics, Orthopedics and Traumatology, Radiation Oncology clinics.



PITUITARY COUNCIL

Formed by the participation of Brain Surgery, Endocrine Diseases, Pathology, Radiology, Medical Oncology, Radiation Oncology, Ophthalmology, Otorhinolaryngology and Anesthesia departments.

THYROID COUNCIL

Personalized treatment plans are determined by the participation of specialist physicians from Endocrine Surgery, Radiology, Endocrinology, Nuclear Medicine and Pediatric Endocrinology when necessary.

DIABETIC FOOT COUNCIL

Formed by the participation of Cardiovascular Surgery, Endocrine Surgery, Internal Medicine, Cardiology, General Surgery, Radiology, Orthopedics departments.

NUTRITION AND NUTRITIONAL DISORDERS COUNCIL

Formed by the participation of Pediatric Gastroenterology, Pediatric Psychiatry, Endocrinology, Specialist Dietician, Specialists in Audiology and Voice Disorders.

ISTINYE UNIVERSITY

Istinye University has established R&D Centers operating in 4 main fields, in which important scientists, each of which is a pioneer in their own field in our country, take part. Our Liv Hospital/Ulus and Vadistanbul physicians, who are among the academic staff of Istinye University Faculty of Medicine have the opportunities provided by the R&D laboratories with international standards and the opportunity to participate in the researches carried out within ISU.

- Stem Cell and Tissue Engineering AUM (ISÜKÖK)
- Molecular Cancer Research Center (ISÜMKAM)
- Neurological Sciences Research and Practice Center (ISÜCAN)
- 3D Design and Prototyping AUM (ISÜ3D)

The Artificial Intelligence Application and Research Center in Medicine, established within the Engineering Faculty of Istinye University, provided an important research and clinical support area for Liv Hospital / Ulus doctors who are faculty members of ISU Faculty of Medicine.



Our Istinye University Genetic Diseases Assessment Center (ISÜGEN) has continued to carry out modern genetic practices and research for the diagnosis and treatment of all genetic diseases in cooperation with Liv Hospital/Ulus AND Vadistanbul physicians.

Istinye University Faculty of Medicine accepted its first students in the 2016-2017 academic year. Our physicians, which are among the academic staff, contribute to the vocational education of the students of the Faculty of Medicine by providing training in our hospital within the scope of the internship program within the scope of theoretical and applied courses.



SOCIAL RESPONSIBILITY PROJECTS

FORCES JOINED FOR SUPPORT OF SPECIAL ATHLETES

Liv Hospital came together with the Friends Association for an awareness project special for the 3 December International Day of Persons with Disabilities. The event, which was organized under the auspices of the Ministry of Youth and Sports of the Republic of Turkey together with private athletes, attracted great attention.

HAPPINESS AGENDA FROM EXHIBITION PHOTOS

While many famous faces of art, sports, health, business and social life were included in the shooting project, together with the special athletes that Liv Hospital has undertaken as the health sponsor, the income from the sale of the happiness agenda, which was created from the photographs of this project and included the motivation sentences of our successful private athletes, was transferred to the athletes. The photographs created with the slogan "Power is in our hearts" were exhibited in Vadistanbul Shopping Mall.



12

Liv Hospital

Annual Report 2021

INTERNATIONAL GUEST SERVICES

INTERNATIONAL GUEST SERVICES

1- Visit of Physicians and Institutions Abroad to Liv Hospital Ulus and Vadistanbul



2- International Health Tourism Fair



INTERNATIONAL GUEST SERVICES

3- Training Meetings with Physicians



4- Host of Foreign Ministry Visits



5- Opening of Liv Hospital Tirana Office



INTERNATIONAL GUEST SERVICES

6- Opening of Liv Hospital Süleymaniye Office



7- Conference participation abroad



8- ISU and Foreign University Affiliation



INTERNATIONAL GUEST SERVICES

9- University students from 8 different cities abroad visit Liv Hospital



10- Visit of Oncology physicians from abroad to Liv Hospital



11- Breast Cancer Awareness Project



INTERNATIONAL GUEST SERVICES

12- Training Programs



INTERNATIONAL GUEST SERVICES

12- Training Programs



INTERNATIONAL GUEST SERVICES

13- Giants of Health Met at Liv Hospital Expo



Liv Hospital Expo brought together world leaders in health, medical tourism agencies, institutions and organizations within the scope of medical tourism from 35 countries. Showing the world how strong Turkey is in health tourism once again, Turkey's advantageous position, leadership, personalized boutique approach in health care and technologies were discussed at Liv Hospital Expo.

The opening speeches of Liv Hospital Expo, which started with a magnificent performance show at Radisson Blu Vadistanbul between 3-4 December, were made by ERI Global President and CEO Bobbie Celler, Liv Hospital Group Coordinator Meri Istiroti and Founding President of the World Health Tourism Council Emin Çakmak.





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