

CHILDREN's HEALTH and DISEASES

Life is Beautiful



ISTANBUL

Ahmet Adnan Saygun Cad.
Canan Sok. No:5 Ulus-Beşiktaş

ANKARA

Bestekar Sok. No:8 06680
Kavaklıdere-Çankaya

livhospital.com

international@livclinics.com

facebook.com/livclinics | linkedin.com/livclinics | twitter.com/livclinics

+90 212 999 80 99 - +90 530 174 33 72

Liv Hospital treasures every living being that comes into the world. Our Pediatric Health and Disease Department offers individual treatments for all children development stages, from birth to adolescence.



In addition to having pediatrician specialists on 24-hour call, examinations are carried out at our polyclinic from 18.00-20.00 (6-8pm). Liv Hospital designed the Pediatric Health Department with children in mind, creating a fun and kid-friendly atmosphere to ease anxiety of children visiting the hospital.

Advanced diagnostic and treatment methods are implemented at the Liv Hospital Pediatric Health and Diseases Department for babies and children up to the age of 18. Patients are carefully assessed by experienced professors and specialists in line with current and joint scientific programs.

Pediatric Health and Diseases Polyclinic offers a wide range of treatments for chest diseases, including allergies and Pediatric Gastroenterology and children heart care. Our polyclinic has been specially designed for children, an entertaining space that helps children overcome their fear of doctors. A fully-equipped breast feeding room is at the service of waiting mothers and an observation room set aside to keep sick babies and children under observation and to perform short-term treatments.



Patients' laboratory tests are taken by an experienced pediatric nurse at our polyclinic.

All our doctors are always accessible for the monitoring of healthy children (vaccinations, nutrition, growth and development) as well as children who are ill.

Every baby born at our hospital receives one home visit from our Home Care Services unit after their discharge from hospital, to assess their individual condition and needs.

Monthly check-ups of babies born at our hospital are carried out, with free of charge development tests by a

pediatric specialist up to the age of one year. Objective testing is carried out by our child development experts in order to evaluate children's mental and physical development according to their age.

Other concerned medical departments and branches are coordinated to provide all required scanning during the period of observation (eye tests, dental tests etc.).

NEONATAL INTENSIVE CARE UNIT

Liv Hospital is fully-equipped with high technology neonatal Intensive Care Unit (ICU) offering medical and nursing care, delivered 24-hours a day by dedicated neonatologists and a compassionate nursing team. The ICU boasts 8 incubators, and 1 ventilator which can be used for alternative methods (HFO).

In order to minimize the risk of infection and to provide the best possible treatment, each infant is placed in a safe room outfitted with state-of-the-technology to ensure that your infant will receive the highest level of care possible.

The purpose of Liv Hospital Neonatal Unit is to provide the safest and most efficient development care for our newborns and support for parents.

The Neonatal Intensive Unit is staffed by one of our doctors (on call for 24 hours) who has special training in newborn care. The NIU is also fully-equipped with the latest equipment and advanced appliances to deliver the best neonatal care in Turkey and provide timely emergency intervention when needed.



Very close observation is made to monitor babies' respiration, circulation, nutrition and infection problems, to implement the most appropriate treatment and to address any problems as they arise.

Our specialists are also available to supervise the transfer of babies with health problems from other hospitals.

Liv Hospital offers home care services for babies following their discharge from the neonatal unit after a period of monitoring and follow-up. Our unit has 8 incubators, 2 of which can be used as open heated cots, with individual rooms for each baby.

TECHNICAL FEATURES of THE NEONATAL UNIT

Every bed has an EKG, respiration, pulse oximeter, with additional monitors for invasive and blood pressure. There are 4 ventilators with nasal / endotracheal CPAP, SIMV, pressure and volume controlled ventilation, and high frequency ventilation equipment

- ✓ Phototherapy
- ✓ Baby-specific mother's milk bank
- ✓ Blood gas analysis and capillary electrolytes
- ✓ Portable X-ray, ultrasound and echocardiograph equipment
- ✓ Transportable ventilator, special incubator and monitors

All patients in our unit have their data measured (vital functions, monitor analysis, ventilator readings, medication applications etc.) with this data digitally monitored so that it can be read and followed within the hospital or outside by means of mobile telephones.

PROCEDURES CARRIED OUT IN THE NEONATAL UNIT

- ✓ Installation of umbilical catheters
- ✓ Thoracic drainage
- ✓ Lumbar puncture
- ✓ Endotracheal intubation
- ✓ Surfactant application
- ✓ Post-op follow-up
- ✓ Partial and total blood exchange
- ✓ Total parenteral nutrition
- ✓ Phototherapy
- ✓ Percutaneous insertion of silastic catheter
- ✓ Newborn circumcision

OUR NEONATAL TEAM

Specialist doctors are on call 24 hours a day for diagnostic and treatment at the unit.

Pediatric surgery, pediatric neurology, pediatric cardiology, cardiovascular surgery, retina and brain surgery specialists support the Unit's dedicated treatment team.

Our nurses are specially trained in neonatal intensive care and resuscitation.

The hospital's infection control committee composed of doctors and nurses continuously monitor and control the Unit with strictly kept records.

Our mission is to provide all our babies with the best natal and post-natal care for the best possible outcomes for a healthy and happy new generation.



BABY ROOMS

Every birth is accompanied by the close involvement of pediatric health and disease specialists. Prior to discharge, every newborn requires to be screened and to undergo essential examinations such as hearing tests, jaundice, hypothyroidism, phenylke-tonuria and metabolic disease screening.

Our baby nurse pays a home visit during the 48-hour period following the baby's discharge. Other health tests and check-ups are carried out during the first week at the Pediatric Health Clinic. In the first hours after birth, minor or temporary issues can generally be addressed in the baby's room. High-risk cases and childbirth problems are purposefully treated in the Neonatal ICU.

MONITORING HIGH-RISK BABIES

The monitoring and care of high-risk cases such as premature births, multiple births, babies whose mothers have diabetes, large babies, babies who have swallowed meconium in the womb, and brain or other damage that results in difficult births, is different from the monitoring carried out in normal births.

These cases involve the risk of issues such as respiratory problems, chronic lung disease, jaundice, feeding difficulties, intracranial bleeding and Retinopathy of Prematurity (eye disease in newborns). The monitoring of high-risk babies is conducted by specialists in the field.

Developmental tests are carried out at our High-Risk Baby Clinic in order to follow development closely; there are far better outcomes when early diagnosed issues are addressed with early physical treatment. Multidisciplinary monitoring and treatment is also provided by various other Liv Hospital departments such as the Eye, Audiology and Speech Therapy Departments. Special attention is paid to the nutrition of premature births or babies who

have undergone extended ICU hospitalization, in order to ensure that they reach height and weight objectives in later years.

During this period special applications such as the fortification of mother's milk, high-calorie foodstuffs and tube feeding are implemented as and when required.

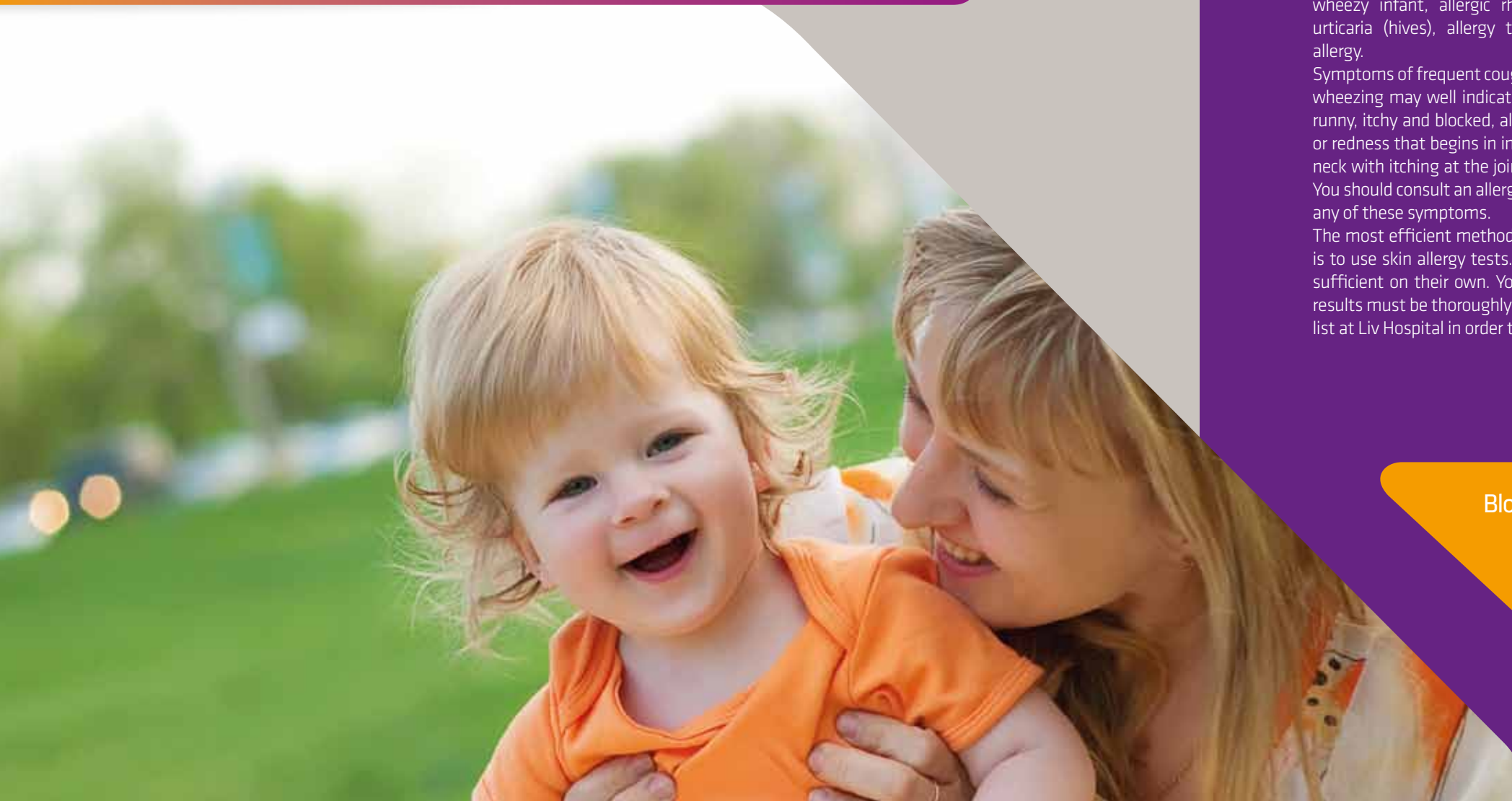
A vaccination program known as a "Cocoon Strategy" is implemented, ensuring that all those in regular contact with the baby (parents & relatives, nannies and health workers) are protected with vaccines for tetanus, adult diphtheria and adult acellular pertussis. Additional protection against endemic and pandemic diseases is given by ensuring that as well as the baby, those who come in to contact with the baby are vaccinated against influenza. Premature births and those with chronic lung or cardiologic disease who are prone to RSV (respiratory syncytial virus) are also at higher risk of severe lower respiratory disease. For this reason, children born between the months of October and March are provided with extra antibody (synagis) protection.

We are proud to be a baby-friendly hospital. Mother's milk is the best form of nutrition for babies. That's why we strongly encourage mothers to begin breastfeeding as soon as they and their baby are in a healthy condition.

Every possible support is given to mother and baby during this period.

Counseling on breastfeeding is given.

CHILDREN'S ALLERGIES AND ASTHMA DEPARTMENT



The number of children suffering from allergies is continuously on the rise. Research shows that one in every 6-7 children has asthma, one in 10 allergic rhinitis and one in 20 eczema. The annual increase in rates is not limited to one country but is seen throughout the world. The main forms of allergy cases are asthma (allergic bronchitis), wheezy infant, allergic rhinitis, eczema, food allergy, urticaria (hives), allergy to medication and bee-sting allergy.

Symptoms of frequent coughing, shortness of breath and wheezing may well indicate asthma; repeated sneezing, runny, itchy and blocked, allergic rhinitis, while facial rash or redness that begins in infancy and develops below the neck with itching at the joints probably signifies eczema. You should consult an allergy specialist if your child shows any of these symptoms.

The most efficient method to diagnose these conditions is to use skin allergy tests. However, these tests are not sufficient on their own. Your child's symptoms and test results must be thoroughly assessed by an allergy specialist at Liv Hospital in order to reach an accurate diagnosis.

A pediatric allergy specialist is a doctor trained in the diagnosis, treatment and follow-up of allergy cases such as asthma, allergic rhinitis, wheezing children, eczema, hives skin allergies, eye allergy, food allergy, drug allergy, insect allergy, occupational allergies, allergic shock and hereditary angioedema in children from birth to adolescence stages. Allergic diseases are known for their onset nature; they may happen all at once. Asthmas, for example, are closely associated with allergic rhinitis. Children with eczema often have food allergies. Pediatric allergy specialists care for allergy cases as a whole.

Skin allergy patch testing and respiration function testing is carried out by specialists at the Pediatric Allergy and Asthma Unit.

Blood allergy tests, sweat tests and asthma monitoring (nitric oxide levels in the breath) testing, are carried out at Liv Hospital.

Moreover, Liv Hospital has the capacity to undertake all necessary radiologic and nuclear medicine tests.

Parents can breathe a sigh of relief at the extensive and advanced expertise used for diagnosis and treatment at Liv Hospital Pediatric Allergy and Asthma Unit.



PEDIATRIC GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION

In addition to the diagnosis and treatment of all pediatric and adolescent development stages diseases of the digestive system from birth to 18 years old (the esophagus, stomach, duodenum, and the small and large intestine), liver and bile duct diseases, our Pediatric Gastroenterology, Hepatology and Nutrition Department represents a sub-branch of medicine that is also equipped to provide specialist nutrition advice and support to both healthy children and to those with chronic diseases that require particular dietary measures and care.

PEDIATRIC CHEST DISEASE UNIT

Our Pediatric Chest Disease Unit diagnoses and treats a wide range of respiratory diseases and lung conditions, including cystic fibrosis, pneumonia, recurrent pneumonia, chronic lung diseases, bronchopulmonary dysplasia in premature birth lung problems, bronchiectasis, long-lasting cough, recurrent interstitial lung disease, and sleep problems. Radiology is crucial in the diagnosis of pediatric chest

diseases. Liv Hospital employs the most advanced radiologic technology and trained specialists to ensure correct diagnosis and treatment. The Department carries out respiratory function tests, sweat tests, and genetic analysis testing for cystic fibrosis.

PEDIATRIC GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION DIAGNOSIS (COMMON SYMPTOMS):

- Chronic / recurrent abdominal pain
- Vomiting
- Diarrhea, bloody diarrhea
- Weight gain, abdominal distension
- Constipation
- Digestive tract bleeding (black-colored stool, vomit that resembles ground coffee)
- Unexplained growth retardation
- Pathology and treatment-resistant anemia
- Fatty Liver disease (obesity)
- Jaundice
- Elevated levels in Liver tests
- Ingestion of foreign material / caustic substance ingestion

COMMON DISEASES OF PEDIATRIC GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION:

- Gastroesophageal reflux disease (GERD)
- Corrosive esophagitis
- Gastritis (acute and chronic)
- Germ-related Helicobacter pylori gastritis
- Ulcer, dyspepsia (indigestion)
- Chronic diarrhea and stunted growth
- Celiac (Coeliac) disease
- Constipation
- Bloody stool, growth retardation and colitis (ulcerative colitis, Crohn's disease)
- Polyps
- Hepatitis and jaundice (hepatitis B, C, D & E)
- Autoimmune hepatitis
- Wilson's disease
- Biliary tract and gall bladder disease
- Pancreatic diseases
- Food allergies (including allergies to cow's milk)
- Loss of appetite, obesity
- Nutritional support (disease-specific nutrition)

DIAGNOSTIC AND TREATMENT PROCEDURES CARRIED OUT BY THE PEDIATRIC GASTROENTEROLOGY DEPARTMENT:

1. Diagnostic endoscopy

 - ✓ Esophagogastroduodenoscopy
 - ✓ Sigmoidoscopy
 - ✓ Colonoscopy
2. Therapeutic / treatment endoscopic procedures

 - ✓ Varicose endoscopic band ligation
 - ✓ Polypectomy
 - ✓ Dilation of esophageal stenosis
 - ✓ Percutaneous endoscopic gastrostomy
3. Liver biopsy

4. 24-hour pH monitoring

5. 13C urea breathing test



PEDIATRIC ENDOCRINOLOGY

Liv Hospital Pediatric Endocrinology Department specializes in the diagnosis, treatment and monitoring of endocrinological problems such as growth retardation, short stature, early puberty, delayed puberty, diabetes, hypoglycemia (low blood sugar), obesity, thyroid and thyroid gland disorders (hypothyroidism-hyperthyroidism), sexual development disorders, penile problems, adrenal gland disorders, irregular periods, excessive hair growth, pituitary gland disorders, Turner's Syndrome, vitamin D-related disorders, calcium and phosphorus metabolism disorders, and various bone complaints especially rickets.

PROCEDURES CARRIED OUT BY THE PEDIATRIC ENDOCRINOLOGY DEPARTMENT:

Liv Hospital carries out all dynamic endocrinological tests (growth hormone stimulation, sugar load tests etc.) required for the correct these types of diseases. All babies born at Liv Hospital undergo hyperthyroid screening in cooperation with our Neonatal Unit.

DIAGNOSTIC AND TREATMENT TESTS CARRIED OUT AT THE PEDIATRIC ENDOCRINOLOGY DEPARTMENT:

- ✓ Hormonal stimulation and suppression tests
- ✓ Analysis of body fat in children
- ✓ Analysis of bone mineral density in children
- ✓ Hypothyroidism screening
- ✓ Growth hormone stimulation tests
- ✓ Tests in early adolescence
- ✓ Bone age determination



PEDIATRIC CARDIOLOGY

Pediatric heart diseases are divided into two groups – hereditary and acquired. Rhythm disorders are evident in both these groups. 8 in 1,000 babies suffer from some kind of hereditary heart condition. The most common acquired heart diseases is acute rheumatic fever.

ADVANCED DIAGNOSTICS AT THE PEDIATRIC CARDIOLOGY DEPARTMENT:

- ✓ Heart electrocardiogram (ECG)
- ✓ Heart X-ray (Telecardiography)
- ✓ Cardiac ultrasonography (Color Doppler echocardiography)
- ✓ Cardiac catheterization and angiography
- ✓ 24-hour ECG monitoring rhythm disorders (Holter ECG),
- ✓ Advanced diagnostic methods are used, including electrophysiological employed



PEDIATRIC HEMATOLOGY



The diagnosis and treatment of all types of blood- and blood product-related disease is carried out in our Pediatric Hematology Unit.

All anemias (iron deficiency anemia, vitamin B12 deficiency anemia), congenital blood disorders (thalassemia, sickle cell anemia and other abnormal hemoglobins),

bone marrow failure (aplastic anemia, Fanconi aplastic anemia, Diamond-Blackfan anemia), idiopathic thrombocytopenic purpura neutropenia, childhood leukemia, bleeding diathesis, coagulation disorders (hemophilia A), are treated and diagnosed by a team of experienced pediatric hematology specialists.

The treatment and diagnosis of pediatric kidney and urinary system disorders and rheumatic diseases is carried out at this dedicated Liv Hospital unit.

The main disorders treated are: urinary tract infections, glomerulonephritis, hematuria, vesicoureteral reflux (VUR), antenatal hydronephrosis, urinary tract stones, urinary tract obstruction (UPD, UVD), urinary incontinence, hemolytic uremic syndrome, Henoch-Schönlein purpura, familial Mediterranean fever (FMF), wetting (enuresis), and hypertension.

PEDIATRIC NEPHROLOGY

PEDIATRIC NEUROLOGY

Pediatric neurology is a multidisciplinary branch of medical science that aims to prevent, reduce, diagnose and treat neurologic issues, and to ensure a better quality of life for children suffering from neurologic disorders. The continuously developing nervous system can be damaged during pregnancy, during or after childbirth. As a result of this, or hereditary disorders, various conditions can arise such as cerebral palsy (paralysis of the brain), epilepsy, mental retardation, movement disorders, autism, muscular diseases, as well as spinal cord and peripheral nerve disorders. These conditions can affect the child throughout his or her life, and in some cases limit their lifespan.

A child is developed as one entity. Disorders of other systems and organs can impact the child's nervous system as well. Emergency neurologic situations are not uncommon in children; the most frequent of these are coma, paralysis or strokes, and febrile as well as non-febrile seizures that can cause lasting damage and in extreme cases even be fatal.



Advanced EEG records of babies and children are kept in special archives at Liv Hospital, which are thoroughly evaluated by experienced pediatric neurology specialists. In addition to EEG tests, BT and MR scan tests are also carried out for children of all ages.

PEDIATRIC – ADOLESCENT PSYCHIATRY

Liv Hospital's Pediatric – Adolescent Psychiatry Clinic offers psychiatric and psychological care services for children and adolescents up to the age of 18. Detailed psychiatric and developmental evaluations are carried out by our Clinic's pediatric / adolescent psychiatrists. Following further clinical/psychological tests, the nature and probable underlying causes of the patient's emotional, behavioral, social and academic issues are determined.

A multidisciplinary team of clinical psychologists, child development specialists and speech therapists well-trained and experienced in the field of pediatric / adolescent psychology work hand in hand to provide care and treatment at the Clinic.

This teamwork allows for management of a strict treatment protocol for each of our young patients. Our experts provide invaluable counseling on the psychological state of children and adolescents who suffer from development issues. Training groups and seminar programs are offered in the clinic's preventive psychological healthcare services. Children and adolescents who are treated at Liv Hospital, and their loved ones, benefit from a high level of care and support from a multidisciplinary team of specialists in pediatric medicine and a number of other fields of medical specialization.



CHILD DEVELOPMENT

PEDIATRIC PHYSICAL TREATMENT AND REHABILITATION

Pediatric rehabilitation applies physiotherapeutic methods designed to eradicate challenges and difficulties experienced by children caused by physical, sensory or cognitive disorders originating in the natal or post-natal stages. As well as helping to develop motor skills, balance, coordination, strength and endurance, this achieves development of the integration of cognitive and sensory processes.

This also serves to help children with physical disabilities attain their maximum physical performance through their daily lives. These care services are dedicated to age-appropriate development steps (e.g. crawling, sitting, standing and walking), basic motor skills, improving breadth of movement and peer participation in school activities, as well as the development of strength, mobility, posture, equilibrium and endurance.

As well as arranging training programs devoted to the intellectual, linguistic, motor, self-care, social and emotional development of children up to the age of 18, we offer counseling guidance to parents on relationship issues with their children.

Developmental Support for Healthy Children

- ✓ Baby growth and development (social, mental, speech and mobility)
- ✓ Monitoring of high-risk babies (premature births, babies in intensive care etc.)
- ✓ Selection of games and play activities appropriate to development
- ✓ Regulation of children's eating, sleeping and toilet habits
- ✓ Intra-sibling relationships
- ✓ Behavioral disorders (bed wetting, nail-biting, thumb-sucking, temper tantrums, defiance etc.)
- ✓ Determining the right age for the child to attend crèche or primary school

Clinical Support for Children with Developmental Problems

- ✓ Pervasive developmental disorders and autism
- ✓ Outstanding and gifted children
- ✓ Children with language and speech problems (stuttering, delayed speech etc.)
- ✓ Children with attention-deficit hyperactivity disorder, learning disabilities and intellectual disabilities
- ✓ Children with hearing, neurological, genetic and metabolic disorders
- ✓ Supporting developmental skills in children in hospital or with long-term health problems

AUTISM CLINIC

The first people to suspect that a child is autistic are the child's parents, doctors, loved ones and teachers. Some families who notice a problem in the child's development may ignore these early signs, dismissing the condition as temporary or not serious to see a specialist. However the most important factor in the future pace of the disorder is early diagnosis. Autism is classified as an emergency disorder in the field of psychiatry. For a definitive diagnosis, the child's detailed developmental history, psychological evaluation, observation of symptoms, determination of whether there is any other medical or psychiatric condition, and an investigation into underlying causes, are required.

Recent research indicates that the preparation and implementation by trained specialists of individualized education programs that take account of the diagnosed child's individual skills and needs remains the most effective method of treatment. As well as the professional treatment team consisting of psychiatrists, clinical psychologists, pediatric neurologists, pediatricians, special needs education experts and speech therapists, everyone who is in social contact with the child - including family and teachers - form an integral part in setting up the action plan. Proper coordination within the team is of crucial importance to offer an effective treatment plan.



Pediatric Psychiatrist

Autism diagnosis and etiologic studies are carried out by a pediatric psychiatrist who is responsible for monitoring the development of the condition, evaluating possible supplementary psychiatric diagnoses, and treatment.

Clinical Psychologist

A clinical psychologist carries out the necessary developmental tests on children diagnosed with autism. The clinical psychologist also provides psychological support to the child and family to assist in overcoming communication issues throughout the treatment phase.

Pediatrician

Pediatricians manage the physical, mental, and emotional well-being of their pediatric patients, in every stage of development - in good health or in illness.

Speech Therapist

Autism impacts the child's linguistic and communication abilities. Speech therapy assesses and treats speech, language and communication problems in children to help them better communicate. Speech therapy is an essential part of autism treatment plan as it plays a great role in determining the child's ability to understand and articulate the language effectively.

Special Needs Learning Specialist

Special Needs Learning Specialists are trained to evaluate and aid children with learning disabilities. They work with the child, the parent, to develop strategies to compensate for any learning deficits. They often work with children one-on-one to develop a learning program that suits the special needs of the child.

Pediatric Neurologist

Autism is a neurodevelopmental disorder. Pediatric neurologist has a special training and experience to treat children suffering from neurological problems such as seizures, delayed speech, epilepsy, weakness or headaches. Our pediatric neurologist advanced training and experience equip them to meet your child's unique needs.



Speech, language and swallowing disorders can be caused by hearing loss, mental disability, autism, Down syndrome, brain injury, stroke, neurological problems, cleft lip-palate, mouth, head and neck cancers, or other genetic or medical disorders. These disorders can be hereditary or the result of accident or injury. The cause is not always determinable. The Liv Hospital Speech and Language Pathology Clinic is devoted to providing healthcare services in the following areas:

- The diagnosis of speech, articulation and fluency disorders, sound quality related problems (disorders of articulation / phonological disorders / apraxia / dysarthria / stuttering / audio disease) and their treatment by means of game-based speech therapy exercises.
- The diagnosis and severity assessment of difficulties in understanding spoken and written language or other forms of expression (like sign language), and its treatment by means of game-based therapies and treatments that support language development.
- The endoscopic and/or radiologic examination of feeding and swallowing problems caused by illness, surgery, stroke or injury, and their treatment by means of various methods of therapy.



LANGUAGE AND SPEECH PATHOLOGY

GENETIC COUNSELING



Genetic counseling helps to create highly individualized treatment plans benefiting from the latest advances in medical and genetic technology. Especially in cases of genetically predisposed individuals (those who have a family history of genetic disorders), genetic counseling has a significant role. Such individuals can benefit from genetic counseling by finding out what genetic issues may or may not apply to their particular cases, and what health issues may occur as a result of these factors. Genetic counselors guide patients with regard to the treatment of the disorders to which they are genetically predisposed. Parents whose unborn child is diagnosed as being exposed to genetic issues may also seek genetic counseling in gaining scientific, accurate and objective information about the likely course of the pregnancy.

CANDIDATES FOR PARENTAL GENETIC COUNSELING

- ✓ Prospective mothers over the age of 33
- ✓ Prospective mothers who have had anomalies detected in previous pregnancy
- ✓ Couples with a family history of genetic disorders or diseases
- ✓ Prospective mothers who have undergone previous miscarriage(s)

PEDIATRIC SKIN DISEASES



Liv Hospital's Department of Pediatric Dermatology is dedicated to the diagnosis and treatment of dermatologic complaints in babies and young adults of all ages, through childhood to adolescence. All kinds of pediatric skin problems are dealt with at the Department, which diagnoses, monitors and treats hereditary skin diseases such as ichthyosis, epidermolysis bullosa, genodermatoses, etc.

- ✓ Testing and treatment is carried out on allergic skin eczemas in children (atopic dermatitis)
- ✓ Hair complaints in children (alopecia areata, hereditary hair problems, etc.) is diagnosed and treated
- ✓ The diagnosis and treatment of commonly observed warts on children is carried out (electrocautery, cryocautery, laser treatment.)

Liv Hospital Oral and Dental Health Clinic educates children in effective preventive methods of oral and dental hygiene and care, including cavity prevention methods such as fissure sealant and fluoride applications. Additionally, Cavity Analysis Tests help to detect the child's tendency to develop cavities by providing data on bacteria counts in the saliva, oral hygiene and eating

habits. This test is part of an extensive treatment plan designed to minimize or eradicate cavity development. In addition, These tests are carried out on younger children to determine future deficiencies and dental disorders that may prompt the need for orthodontic treatment, as the child goes into puberty and adolescence.

Filings and Canal Treatment

Just as adults, children can develop cavities and other dental issues which are effectively treated by dental fillings and root canal procedures to leave your mouth free of cavity and with a perfect smile. Treatment carried out on milk teeth also helps to prevent infection and the emergence of healthy adult teeth.

Placeholders

Placeholders are used to fill the place of teeth that have been extracted because they were damaged beyond repair or for other reasons, preserving the space for the emergence of Development of permanent teeth; this prevents future crowding and other dental issues.

Dental Trauma Treatment

Broken, chipped, or lost teeth are common in children as a result of falls or an accident; wobbly teeth can also be a problem. Dental trauma can be effectively treated by the most advanced technology and innovative techniques.

Dental Treatment Under General Anesthetic or Sedation

Our clinic and operating room is able to treat children under the age of 4 who have a fear of treatment as the result of previous experience, or who cannot undergo treatment normally due to health problems, with general anesthetic or sedation.

Orthodontics (Dental Correction)

Orthodontics is the branch of dental medicine dealing with the correction of irregularities to dental and jaw structure and development. Orthodontists often use corrective devices such as brackets. Orthodontic treatment facilitates dental gap closure, eradicating jaw closure issues, teeth straightening, and the correct alignment of teeth and lips.

PEDIATRIC ORAL AND DENTAL HEALTH



SURGICAL UNITS

All surgical interventions on children are carried out by pediatric surgeons, doctors and anesthesiologists who are specially trained in treating babies and children. Pediatric anesthesiologists contribute to the pre-op preparation of the surgical team (through the necessary pre-op tests and examinations), the pre-op application of anxiety-counteracting medications, and post-op pain control and relief. Liv Hospital Pediatric Surgery Clinic is devoted to the polyclinic monitoring and treatment of surgical issues relating to the entire digestive tract, urinary tract, and the chest cavity except the heart, in children from birth to the age of 16.

Surgical procedures are carried out using minimally invasive methods such as laparoscopy, thoracoscopy and endoscopy). These techniques also leave the smallest possible surgical scar. Laparoscopic surgery is preferred for gall bladder, undescended testes, appendicitis, and Hirschsprung cases; while esophagoscopic / bronchoscopic methods are used in kidney and bladder disease, and gastrointestinal foreign bodies and diseases in the cystoscopic respiratory tract. The greatest advantages of keyhole surgery techniques is that scarring is reduced almost to nothing, infection risk is minimized, and your child is able to return to his or her normal social and school life much earlier than with traditional methods of closed surgery.

WHAT ARE THE ADVANTAGES OF NEONATAL CIRCUMCISION?

Various studies have shown that the rate of urinary tract infection in newborns and infants is 10 times lower in circumcised children when compared to uncircumcised children. It has been established that various bacteria are cleaned from the body as they cannot survive without the moist and welcoming environment under the foreskin. The incidence of urinary tract infection in circumcised babies is extremely low.

Since the vascular structure of the foreskin is still undeveloped, it is easier to control bleeding and the risk of post-procedure bleeding is very low. Newborn babies can feel pain during the circumcision procedure but this is minimized by the application of an anesthetic ointment

to the region half an hour before the procedure, which is not carried out before the anesthetic has had time to take effect.

Even though the pain killer loses its effect after the procedure, there is no need to continue medication at home the following day.

Post-procedure care is easy. There is no need for supplementary care because healing takes place very rapidly; the parents can return to their activities without delay.

The cosmetic outcome of this procedure, which is carried out without stitches, is superior to surgery involving stitches.



CIRCUMCISION

Circumcision is the surgical removal of the prepuce, the skin covering the glans or tip of the penis more commonly known as the foreskin. The condition in which the foreskin tightens to cover the urinary hole is called phimosis, the resultant infection balanitis. Research shows that circumcision is effective in preventing infections of the urinary tract. Statistically, there are 10 cases of infection in uncircumcised children for every 1 in circumcised children. The best time for the procedure is soon after birth.



Bleeding is minimized due to the lack of vascularization in the penis and the recovery and cosmetic outcomes are close to perfect.

There is no such thing as an easy or simple surgical procedure. The procedure is conducted by a trained physician, who will also know what to do in the event that any issues requiring additional intervention arise.

The benefits of a specialist physician carrying out the circumcision are:

- ✓ In the event that the infant has a blood related disorder such as hemophilia, the doctor will be able to administer medication to prevent any side effects.
- ✓ The probability of any errors is reduced. Since the circumcision instruments are sterilized, the risk that your child will be infected by hepatitis or any other blood borne disease is reduced to a minimum.
- ✓ Since there will be an appropriate extent of foreskin removal, subsequent growth and development of the penis will be normal.
- ✓ The infant will be given pain relief medication and will therefore feel little discomfort.
- ✓ Any anatomic or developmental penile issues (curvature, irregularities of the urinary hole etc.) will be detected and can be addressed by the physician without delay.

PEDIATRIC ORTHOPEDICS

Pediatric Orthopedics and Traumatology is the sub-branch concerned with the diagnosis and treatment of congenital or acquired childhood neurological, infectious, tumoral, traumatic and other diseases or disorders of the muscular and skeletal system. Pediatric orthopedics is concerned fundamentally with childhood and young adult cases. The field is further divided into sub branches such as upper extremity pediatrics, lower extremity and spinal pediatrics, and so on. The basic aim of pediatric orthopedics is to diagnose and treat the

patient in the most efficient manner possible, allowing him or her the shortest recovery period and return to normal life. Many orthopedic issues that emerge in later life originate in childhood orthopedic conditions that have been undiagnosed or untreated. For this reason, pediatric orthopedics plays a major role in reducing the problems that are subsequently faced by adult orthopedic specialists.



PEDIATRIC EYE, NOSE AND THROAT (ENT)

Liv Hospital Pediatric ENT Department is concerned with the diagnosis and treatment of congenital or acquired childhood infections, tumoral, developmental and traumatic ENT problems.

The most common ENT problems in children are adenoid and tonsil problems. Recent advances in medical science and technology now allow techniques such as cochlear implants ("bionic ears") brain stem implants active middle ear implants and bone-implanted hearing devices, to treat cases of hearing loss.

Another significant area of activity for the Pediatric ENT Department is congenital and acquired narrowing of the airways. Other areas of interest include the treatment of benign and malignant masses in the head and neck region, and infections and foreign bodies in the upper respiratory tract.

Liv Hospital Pediatric ENT Department provides treatment in the following main areas:

- ✔ Tonsil and adenoid problems
- ✔ Middle ear infections
- ✔ Middle ear effusions
- ✔ Congenital anomalies of the ear auricle and the external auditory canal
- ✔ Genetic and acquired hearing loss
- ✔ Congenital or acquired stenosis of the larynx and trachea
- ✔ Sinusitis
- ✔ Childhood tumors



ADENOID AND TONSIL PROBLEMS

The most common ENT complaints in children are adenoid and tonsil problems. Surgical solutions to problems related to such conditions as sleeping with an open mouth, snoring, and pauses in breathing in ones sleep (apne) are carried out, using the most advanced techniques and surgical methods.

MIDDLE EAR INFECTION / FLUID

Middle ear infection is a childhood disease. Although it can usually be treated with medication, cases that do not respond to treatment or recurring cases may require the implantation of a tube in the ear.

IMPAIRED HEARING

Recent advances in medical science and technology now allow techniques such as cochlear implants ("bionic ears") brain stem implants active middle ear implants and bone-implanted hearing devices, to treat cases of hearing loss.

NARROWING OF THE AIRWAYS

Another significant area of activity for the Pediatric ENT Department is congenital and acquired narrowing of the airways. Some cases of this kind require surgical intervention.

TUMORS

The treatment of benign and malignant masses in the head and neck region are observed in children just as they are in adults. While surgical intervention is sufficient in cases of benign mass, malignant cases may require a combination of surgery, chemotherapy and radiotherapy.



Numerous eye conditions are observed in children. Various retinal disorders such as cataracts and glaucoma that are common in adults can emerge either at childbirth or in the first stages of life. Premature babies tend to suffer from very early and severe retinal disorders. If not treated correctly in time, this can result in permanent and severe visual impairment. In rare cases some genetic diseases emerge in childhood. The monitoring of these conditions, strabismus (squint) treatment and the correction of refractive disorders is of the highest importance in such cases. "Lazy eye" conditions can result from untreated refractive disorders or strabismus. After a certain age, strabismus and "lazy eye" treatment is extremely difficult. The treatment of pediatric disorders of the eye requires a certain level of accumulated expertise and experience. Diagnostic techniques used for children before they are able to speak are quite different from those used in diagnosing adults. Liv Hospital employs a team of specialists and experts in the treatment of pediatric eye complaints that fulfill these criteria. Working hand in hand with our pediatric doctors, our entire pediatric team is dedicated to the treatment of children's eye conditions using the most advanced treatment methods.

EYE DISEASES AND DISORDERS

This is the field of medical specialization pertaining to the diagnosis and treatment of congenital and acquired brain, nerve and spinal disease in infants and children. Amongst the conditions most commonly treated within this framework are:

- ✓ Brain and spinal cord tumors in infants and children
- ✓ Birth (congenital) malformations
- ✓ Neural tube closure defects such as meningocele, myelomeningocele and encephalocele
- ✓ Hydrocephalus
- ✓ Arachnoid cysts
- ✓ Arnold-Chiari malformation
- ✓ Dandy-Walker syndrome
- ✓ Tethered (stretched) cord syndrome
- ✓ Split cord malformation
- ✓ Head trauma and related pathologies (skull fracture, epidural hematoma, subdural hematoma, and intracerebral hemorrhage, etc.)

The treatment of all these pathologies is performed in a multidisciplinary framework in cooperation with other concerned units such as pediatrics, genetics, radiology and oncology. The patient's family and loved ones are kept informed throughout the diagnostic and treatment process. If surgical treatment is required, high level supporting techniques such as computer-assisted targeting systems, operative electrophysiological monitoring and operative fluorescein angiography are used in order to minimize surgical risks.



PEDIATRIC BRAIN SURGERY





ADOLESCENT GYNECOLOGY

Puberty is the time when bodies begin to change from girls' bodies to women's bodies; and from boys' bodies to men's bodies. Girls reach adolescence and sexual maturity earlier than boys.

Changes that occur during adolescence:

- ✓ Breast development
- ✓ Hair growth in the genital area and under the arms
- ✓ Increase in height and weight
- ✓ Onset of menstruation
- ✓ Emotional fluctuations, psychological changes

Since some girls undergo these changes early and others much later, the process of adapting to these changes can be challenging in some cases. In the event that a girl has not started menstruating or shown other signs of adolescence by the age of 14, it is important that professional medical advice is sought from a trained specialist.

A balanced diet, daily exercise, sufficient sleep and maintaining an ideal weight are important factors during this period. Regular medical checkups are of paramount importance during this period. This is also an appropriate time for women to receive cervical cancer vaccination.



PARTICIPATING CLINICS

- Adolescent Gynecology Clinic
- Children's Asthma and Allergy Clinic
- Pediatric Neurosurgery Clinic
- Pediatric Surgery Clinic
- Pediatric Dermatology Clinic
- Pediatric Dentistry and Oral Health Clinic
- Pediatric Endocrinology Clinic
- Pediatric and Adolescent Gynecology Clinic
- Pediatric and Adolescent Psychiatry Clinic
- Pediatric Physical Therapy and Rehabilitation Center
- Pediatric Gastroenterology, Hepatology and Nutrition Clinic
- Child Development Clinic
- Pediatric Eye Clinic
- Pediatric Pulmonology Clinic
- Pediatric Hematology Clinic
- Pediatric Cardiac Health Clinic
- Pediatric Ear, Nose and Throat Clinic
- Pediatric Nephrology Clinic
- Pediatric Neurology Clinic
- Pediatric Orthopedic Clinic
- Pediatric Health and Diseases Clinic
- Genetics Clinic
- Autism Clinic
- High-Risk Infant Monitoring Clinic
- Neonatal Intensive Care Unit

CONTENTS

Our children are our greatest treasure... Our future

Our greatest obligation towards our children is to build a healthy future for them with regular medical checkups and compassionate parental care.

Seeing our children healthy and happy is life's greatest pleasure.

02	Introduction	
05	Neonatal Intensive Care Unit	
06	Baby Rooms	
07	Monitoring At-risk Babies	
09	Children's Allergies and Asthma Department	
11	Pediatric Gastroenterology, Hepatology and Nutrition	
13	Pediatric Endocrinology	
15	Pediatric Cardiology	
17	Pediatric Hematology	
19	Pediatric Nephrology	
20	Pediatric Neurology	
23	Pediatric – Adolescent Psychiatry	
24	Pediatric Physical Treatment and Rehabilitation	
25	Child Development	
27	Autism Clinic	
28	Language and Speech Pathology	
29	Genetik Danışmanlık	
31	Pediatric Skin Diseases	
33	Pediatric Oral and Dental Health	
35	Surgical Units	
36	Pediatric Orthopedics	
38	Pediatric Ear, Nose And Throat (Ent)	
41	Eye Diseases and Disorders	
42	Pediatric Brain Surgery	
44	Adolescent Gynecology	