USHAŞ

USHAŞ INTERNATIONAL HEALTH SERVICES INC.

TURKISH MEDICAL CITY


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TURKISH MEDICAL CITY

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Message from
Vice Chairman of the Board - General Director
MEHMET ALİ KILIÇKAYA

USHAŞ introduces all our Public hospitals to the world as “Turkish Medical City”.

In order to present our high quality, reliable and accessible health system in our country to international patients, who want to visit Turkey for treatment. We give service under Turkish Medical City brand name with the assurance of USHAŞ.

As USHAŞ, we aim to achieve many firsts and successes in the field of health all around the world, we will continue our health tourism activities to ensure that the Turkish healthcare system is set as an example globally. Most importantly, to heal all patients who travel to our country for better healthcare.

USHAŞ

USHAŞ, which was created from the need to increase the worldwide awareness of health services in our country, started its activities on 04.02.2019, as the relevant organization of the ministry of health.

With the objective of making our country a world brand in health tourism, it has developed strategies to develop the quality standards of health care in Turkey and to promote it to the world, supply and coordinate industrial catalogue .

Today, USHAŞ, which has reached a leading position in the export of health services in the country, continues its activities with great determination and by keeping in touch with relevant public institutions and the private sector.

MISSION

- To assume a leading position in exportation of health services and public / private sector coordination within the country.
- To strengthen the image of the Turkey by ensuring the effective promotion of Turkey’s health capacities, opportunities and potential abroad.
- To contribute and to develop strategies for increasing the quality and standard of health services provided abroad.
- To assume a leading role in the exportation of health system and education.
- To carry out strategic activities within the scope of localization Project in Pharmaceuticals, medical devices and supplies and to provide support in decreasing the current deficit.

VISION

To make Turkey the world’s most successful brand in health tourism, to be a strategic solution partner for pharmaceuticals, medical devices and materials.

TURKISH MEDICAL CITY

Turkish Medical City which is a sub-brand of USHAŞ, the relevant institution of the Ministry of Health, serves foreign patients at international standards. Turkish Medical City provides native and international patient-centred, compassionate and superior healthcare services to all patients in Public Hospitals, this makes Turkey's largest, most comprehensive and advanced healthcare system.

Turkish City Hospitals have an exceptional collaboration that combines the comprehensiveness of public healthcare services with the service expertise of the private sector. This unique model helps us deliver excellent service outcomes to our patients at an affordable cost while delivering superior healthcare as a standard for all.

OUR CARE

We truly understand that a better patient experience can accelerate the patient care cycle. A comforting, stress-free, coordinated service in a pleasant, calm environment helps a lot on the road to recovery. Compassion and kindness produce better health care outcomes, patients heal faster and they feel less pain and anxiety. That is why compassionate patient care based on the best scientific developments available comes first in Turkish Medical City.

OUR CAPABILITIES

The nation's leading, respected and world-renowned doctors and talented healthcare professionals are handpicked to work in Turkish Medical Cities. Our sought-after doctors and experienced health care professionals are working at all hours of the day to deliver excellent health care outcomes for all medical conditions from common to complex with a respectful, helpful and reliable approach.

At the same time, it has an affiliation with the Turkish Health Sciences University, which has all the necessary education and research environment to provide advanced, result-oriented and quality service in the field of health in city hospitals where health services are available. The Turkish Health System and Service are gathered under one roof for our patients through City Hospitals, which cooperate with universities providing education in the field of health. As Turkish Medical City, we offer superior healthcare service focused on patient and treatment.



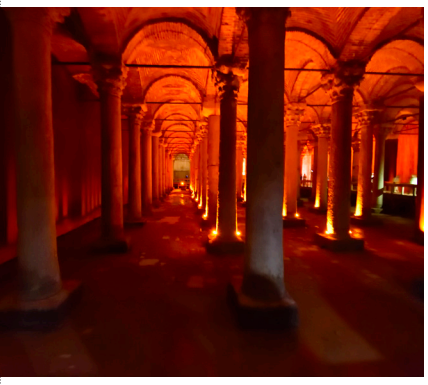
WHY TURKEY?

Since ancient times, Anatolian Geography has been a healthcare base with its thermal springs, historical hospitals, traditional and complementary medicine expertise.

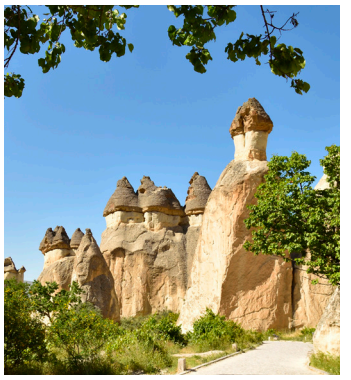


The Turkish Health System completely evolved with advanced medical technology in the structure of the modern Republic of Turkey and world-class modern medical education, reached its peak with the national “Health Transformation Program” initiated in 2003. With the individual-oriented “Health Transformation Program”, the main purpose of which can be summarized as ‘‘Providing accessible, qualified and sustainable health services in an effective, high-quality and efficient way for everyone” Turkey preserves its accomplishment of being among the top countries that are preferred by citizens all around the world.

Turkey is among the first with a high number of health institutions accredited by the independent international accreditation body JCI, which is accepted as the gold standard in global healthcare services. At the same time, all health institutions providing healthcare services in Turkey are subject to national SKS health quality accreditation inspections focused on patient care quality and patient safety implemented by the Ministry of Health. TÜSKA, Turkey’s official accreditation brand in healthcare, is approved by the International Society for Quality in Health Care (ISQua), the top organization regarding accreditation in the field of healthcare around the globe.













TURKISH
MEDICAL CITY







PUBLIC HOSPITALS



- Ankara City Hospital
- Adana City Hospital
- Ankara Dr. Abdurrahman Yurtaslan Oncology Education and Research Hospital
- Antalya Education and Research Hospital
- Bursa City Hospital
- Istanbul Başakşehir Çam & Sakura City Hospital
- Istanbul Kartal Dr. Lütfi Kırdar City Hospital
- Kayseri Education and Research City Hospital
- Mersin City Hospital









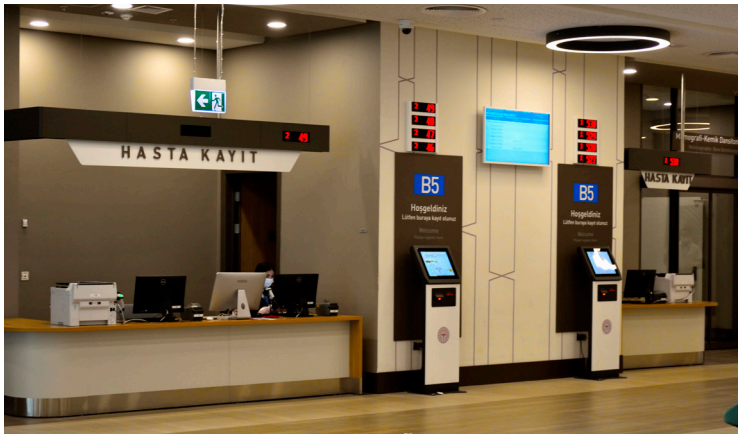
QUALITY POLICY

To certify the quality of health service delivery in Turkey, hospital administrations apply to the Turkish Standards Institute or private certification bodies to obtain TS-EN ISO 9001 certificate. The standards in the ISO 9001 series are frequently used in our country. These standards include preventive and regulatory measures to take corrective measures and minimize quality-related problems when unexpected or unacceptable disruptions occur during production and service delivery activities with the establishment of a system under the requirements of the ISO 9001 quality assurance system, its management provides the opportunity to operate in a more systematic and auditable manner.



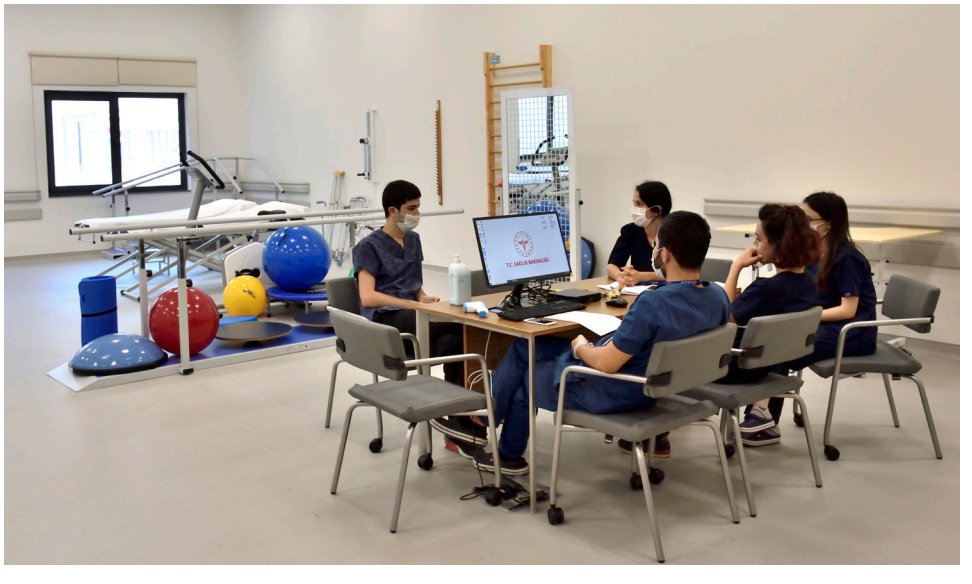

A2
Poliklinik
A4
Kan ve Numune Alma
A6
A7
E1
E2


stryker


HASTA KAYIT
B5
Hoşgeldiniz
B5
Hoşgeldiniz


07
06


Kemoterapi Salonu -4
Chemotherapy Hall -4



INTERNATIONAL PATIENT CENTER

The International Patient Center offers a wide range of services for patients and visitors from other countries. Our staff specializes in the provision of services, including counselling, diagnostic services, billing, travel, accommodation arrangements, and interpretation services.

Accommodation

International Patient Center has negotiated discounted rates with a number of hotels and residential businesses. The contracted hotels are located nearby our hospitals or in the central areas of the city. Before you arrive, an International Patient Center representative will work with you to select accommodations that best suit your needs.

Ground Transportation

A representative of International Patient Center will meet you at the airport upon your arrival and accompany you throughout your medical transfers.

Language Interpretation Services

At City Hospitals, we provide interpretation services in many languages at no cost. Interpreters will assist you in all your medical appointments and translating patient guide materials.

YOUR SECOND HOME FOR TREATMENT











The International Patient Service Center is designed as a “single” service center, offers all necessary medical services from the day of your request up to the time of your return to your homeland. It is a single service center for obtaining medical information, orientation, and registration.

Our foreign patient team consists of the best professionals and physicians. This team of dedicated professionals organize a treatment program for patients from other countries according to their needs and expectations.

We can help you with the following services before, during, and after your stay.

Services

- Providing information about medical cities and doctors
- Getting free second opinion
- Providing medical treatment plans
- Providing medical treatment price quotes
- Organizing medical appointments
- Visa procedure assistance
- International flight assistance
- Organizing airport / hotel / hospital transportation
- Ambulance services
- Translation services
- Assistance with medical reports
- Assistance with financial procedures
- Post-treatment communication with doctors





MEDICAL TECHNOLOGIES

Our hospitals' design is focused on operational efficiency and patient safety, supported with advanced medical devices, the latest information technologies, and smart infrastructure solutions to deliver a better diagnosis, treatment and rehabilitation.



FORCE CT - WORLD'S LEAST RADIATION COMPUTED TOMOGRAPHY (CT) SYSTEM

The new generation Force Computed Tomography system allows coronary CT Angiography to be performed without the use of a heartbeat-independent beta-blocker thanks to the return of double tube double detector technology and completing a full turn in 0.25 seconds.

The FAST 3D Camera, a first in the world, detects the patient's location in 3 dimensions with an infrared light source. In this way, the system automatically positions the patient on the patient table, independent of the user. With this feature, which only belongs to FAST technology, patients are not exposed to overdose that may occur due to incorrect positioning with respect to the center of gravity.

Force CT, the only kidney-friendly computed tomography system in the world, allows imaging with the use of trace amounts of contrast material thanks to its Turbo Flash mode and high generator power thus, patients with chronic kidney disease or diabetes patients with contrast agent sensitivity can be easily examined. With its 78 cm wide gantry opening, it creates a comfortable space for patients with claustrophobia, the system automatically adjusts organ-specific voltage according to the body mass index of the patient, allowing ultra-low-dose capture. With the Force CT system, especially for oncology patients, thanks to the Tin Filter and Dual Energy technologies in the system, air and soft tissue separation and tissue characterization are provided at the highest level. Thus, the chance of diagnosing anomalies that can be seen in the early stages increases.

SPECT CT

Single-photon emission tomography/computed tomography (SPECT/CT); is a diagnostic imaging technique that provides functional information from SPECT and anatomical information from CT. Besides many other indications, SPECT/CT is used in the planning of medical treatment, surgical treatment, and internal/external radiotherapy. In this review, we presented the role of SPECT/CT in the planning of radiotherapy and medical/surgical treatment.

It is a nuclear imaging scan that combines computed tomography with radioactive material and a gamma camera. SPECT scan is an imaging test that shows how blood reaches tissues and organs, as well as detecting strokes, stress fractures, infections, and tumors.

Before the SPECT scan, a radioactive tracer is injected into the bloodstream. Typically, iodine-123, technetium-99m, xenon-133, thallium-201, and fluorine-18 are used as radioactive tracers of spect scans. Tracers used in SPECT scans are not absorbed by tissues, unlike those used in PET scans. It stays in the bloodstream. This radioactive tracer, injected into the bloodstream, emits gamma rays that are detected by the gamma camera. These images obtained by gamma camera are combined with tomographic images and the desired image is obtained.

PET – CT

Which is a method that increases success in the fight against cancer to identify cancerous tissues, treatment planning, and evaluation of the process, is considered as one of the most important technologies for many patients to have a healthy life. Positron emission tomography (PET-CT) technology, combined with computed tomography (CT), is an important technology medical imaging method that enables the diagnosis of many diseases. PET / CT is widely used in the diagnosis and staging of cancer. In addition, its effectiveness is utilized in the diagnosis of "undiagnosed diseases" such as fever of unknown origin, presence of infection foci, detection of living tissue in cardiac patients, and differentiation of Alzheimer's and dementia. In particular, all stages are carried out with a PET / CT device for the initial diagnosis, staging, determination of the prevalence, and correct treatment plan. A road map of cancer treatment with PET/CT makes a significant contribution to the fight against the disease.

MEDICAL TECHNOLOGIES



3 TESLA MRI

Radiological imaging methods have an important place in the diagnosis and treatment of diseases. Magnetic Resonance (MRI) imaging applications, which is a cross-sectional examination of any part of the body, called a giant magnet, are also being renewed day by day with the help of developing technology. 3 Tesla MRI technology has come to the fore in recent years with its patient comfort being at the forefront, quality, and reliable results.

Imaging methods are of great importance, especially in terms of making the correct diagnosis and transitioning to appropriate treatment planning. Therefore, one of the most preferred method is MRI. In recent years, the tendency to use devices with higher magnetic field strength, which provides both ease of use and advantage for patients and physicians, has increased. If the device used in imaging is 3 Tesla MRI, more signals can be collected from the tissue. Since the device collects data from 64 channels, it is especially important in brain and musculoskeletal diseases thanks to its faster and more data collection compared to similar ones.

This provides the advantage of both making examinations in a shorter time and converting the obtained data to an image with high resolution.

INTRAOPERATIVE MRI 3 TESLA

IMRI is an imaging technique that enables surgeons to examine a patient while they are operating on the patient. It helps minimize the risk of damaging the brain while preserving its integrity.

High-field iMRI is typically performed more cost-effectively than other imaging techniques. Its advantages include improved detection of residual tumor and shorter operating room time. There are a couple of ranges of iMRI which gives an advantage for a simpler operating preparation and to be portable. The disadvantage of this is the quality of the image resolution. A better strength is available in 1.5 and 3T which provides a good spatial and contrast for surgeons to be more accurate in evaluating the images. High-field iMRI needs to be operated in an adjacent room as the MRI magnet has a high-field. The patient would need to move towards the magnet to get the image, or you could have the iMRI move around the patient by having the MRI magnet hanging from the ceiling-mounted rails to get the images. The other approach would be by not moving the patient from the operating theater which will improve workflow and the safety of airway control, monitoring, and head control.

The most need for IMRI is by neurosurgery, especially to remove brain tumors. The system can also be used for interventional neurovascular operations.

MEDICAL TECHNOLOGIES



3D TOMOSYNTHESIS MAMMOGRAPHY

Tomosynthesis is a type of digital mammography system. Tomosynthesis can be used to diagnose breast cancer. Since the tomosynthesis device has a low radiation dose, it is getting more common day by day. It performs breast examinations with 3D tomosynthesis mammography.

4-DIMENSIONAL MAMMARY ULTRASONOGRAPHY

Ultrasonography is the first method of choice in the examination of the abdomen, pelvic organs, breast evaluation and pregnancy follow-up due to its easy and fast application among the radiological diagnostic methods, its non-radiation and low cost.

It is possible to evaluate the fetus in the mother's womb by 4-dimensional examination, especially in pregnant women between 16-26 weeks and it can be recorded with photo-CD. The development of high-resolution ultrasonography devices is the primary examination method used in the clarification of pathologies of organs such as thyroid, testis, breast, salivary glands as well as abdominal organs.

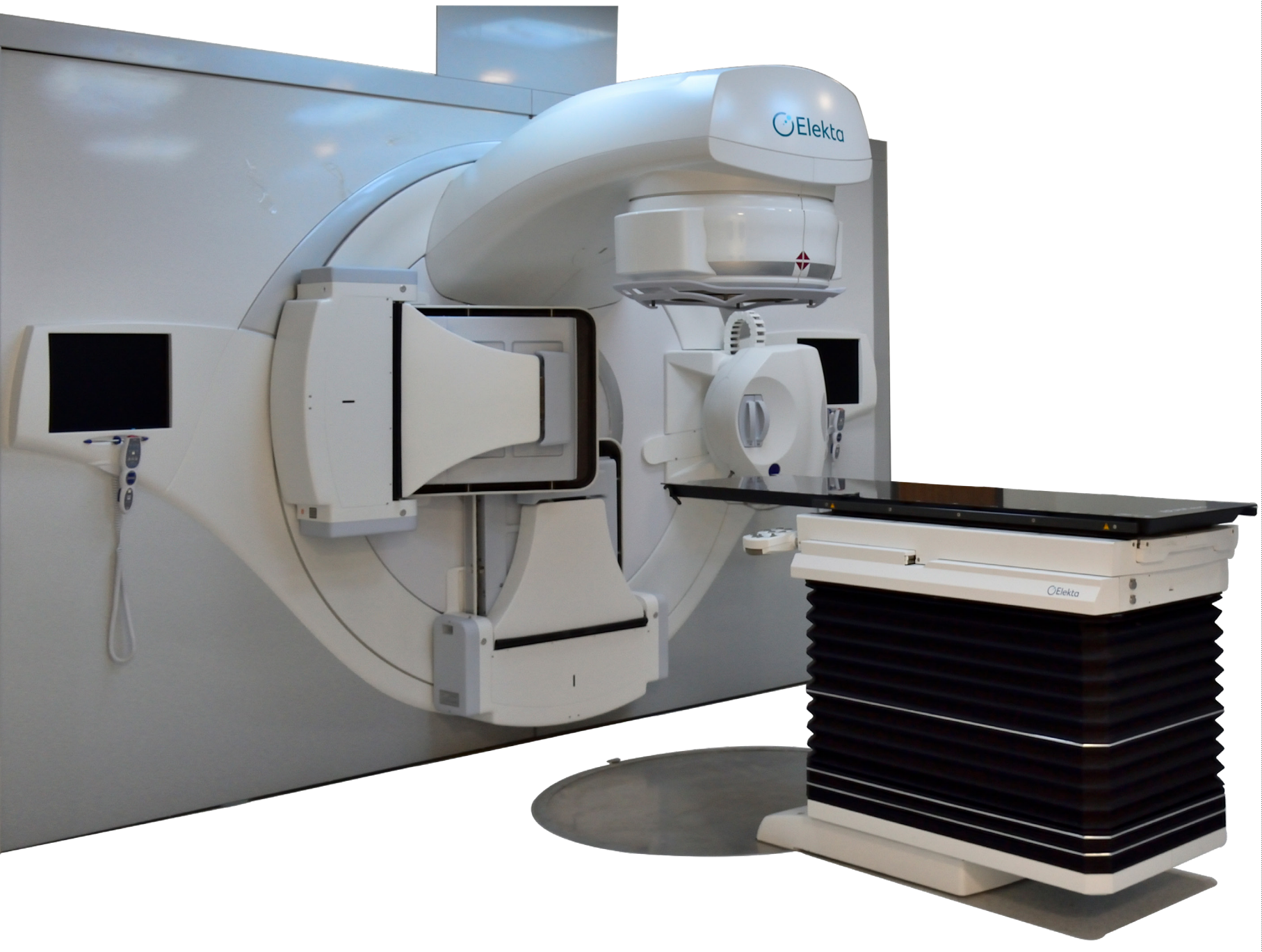
ANGIOGRAPHY

Angio can be summarized as the imaging of the vessels that feed the heart is called coronary vessels. This is the method used to view these vessels when there is a suspicion of coronary artery disease, which is known as arteriosclerosis, or when the symptoms of the disease appear. The most common symptom indicating the disease is chest pain. Coronary angiography is recommended with two different approaches. If the physician detects complaints (such as the threat of heart attack) in the patient indicating the severity of the condition, he/she directly performs angiography without the need for some tests. Angiography should also be done directly during an acute heart attack. The purpose here is to detect the occluded vessel immediately, beyond the visualization of the heart vessels, and to open the vessels (stenting) to stop the heart attack. Balloon angioplasty and stenting are done together with angiography to stop it within the first two hours after the heart attack begins. In this way, both the risk of death is reduced and the patient is saved from the effects of a long-term heart attack.

CEREBRAL ANGIOGRAPHY DSA

Cerebral angiography is simply the imaging of the brain vessels. Since the brain is surrounded by skull bones, quality imaging is required to reveal all vascular pathologies, not just imaging. Normal heart angio devices are insufficient regarding this. Therefore, DSA, which is the abbreviation of Digital Subtraction Angiography words, should be done. Digital subtraction angiography removes bones and all other tissues, allows only vein imaging and reveals all vessels, provides excellent imaging. Subtraction in the term means subtraction. It refers to removing extravascular tissues.

MEDICAL TECHNOLOGIES



RAPIDARC - TRILOGY

The lRapidarc is a cancer treatment device produced with advanced technology. This device is capable of volumetric and density-adjusted rotational irradiation. Thanks to the density adjustment feature, it is possible to plan the treatment at the desired intensity and the desired dose, considering the tumor shape, extension and relations with neighboring organs.

The control of treatment accuracy is done with snapshots taken before each treatment.

With this image-guided treatment, the tumor can be irradiated with high accuracy, while intact tissues can be protected with the same sensitivity. Rapidarc significantly shortens the patient's treatment time in irradiation compared to other similar radiotherapy devices.

TOMOTHERAPY HDA

In Tomotherapy, which is an advanced technology product, cancer cells are targeted with the "point shot" technique and special "personalized" radiation treatments are applied for each patient.

Tomotherapy Device is a system inspired by a Computerized Tomography system, and designed by placing Linear Accelerator for treatment purposes instead of tomography tube and thanks to its gantry structure, it is a system that can perform 3-dimensional high-level imaging and also 3-dimensional high-level beam treatments as helical. It is a unique system that can perform irradiation by rotating helically without stopping, cross-section scanning and treatment due to its treatment structure and functioning style. "Tomo" literally means "Section" in Greek and Latin and the concept got its name from here. This "cross-sectional treatment" process focuses itself on the tumor in each cross-section range and aims only to irradiate the tumor. This treatment process is compared to making 3-dimensional organ painting in different colors with a very thin pen in many respects. In this way, in the tomotherapy treatment performed with Tomotherapy devices, critical and healthy organs are protected and oncology patients are successfully treated with the help of photon x-rays.

TRUEBEAM STX

In the treatment of TrueBeam STx cancer with radiotherapy, today the principle of "targeted irradiation" is used. By focusing on the cancerous cell in radiation therapy technologies, it is ensured that healthy cells are least damaged. The TrueBeam STx system is a new generation beam therapy technology. TrueBeam STx is used in Radiation Oncology to irradiate any tumor in every part of the body. System; Robotic imaging uses many technical innovations with automatic patient positioning, motion management, and completely reconstructed control features to dynamically synchronize therapy. It is generally used successfully in the treatment of tumors in hard-to-reach areas. TrueBeam STx can deliver higher doses in a short time in treatment and in this respect, it significantly reduces the number of sessions and duration.

SINGLE DOSE RADIOTHERAPY

Radiotherapy application performed in the operating room during surgery is called intraoperative radiotherapy. This treatment is applied with mobile X-ray generators in a single session. During the application, after the tumor is removed, the special applicator of the device is placed in the tumor area. Following the necessary measurements, high-dose radiation is given only to this area, while intact tissues are completely protected. In short, radiation therapy is also completed in one go during surgery. Intraoperative radiotherapy started to be used routinely for breast cancer in Europe in 1999 for the first time.

This treatment method is a treatment method that has been used widely in the world for an average of ten years and has a lot of clinical studies in breast cancer. It has been most commonly used in early stage breast cancer. In patients who have undergone breast conserving surgery, it is very advantageous to perform partial breast irradiation with intraoperative radiotherapy, since most of the recurrences in the breast area in the tumor bed. In these patients, intraoperative radiotherapy has advantages over conventional radiotherapy, especially in terms of time and cosmetics.

MEDICAL TECHNOLOGIES





ROBOT DA VINCI

The da Vinci robotic surgery system, which has enabled many people to regain their health very quickly since the day it was used in the field of medicine, is a third surgical method used as an alternative to open surgery and laparoscopic surgery.

The da Vinci robotic surgery system, which has important advantages not only for the surgeon but also for the patient, greatly shortens the length of stay in the hospital. Although the word “robot” is included in the name, it causes question marks in many people’s minds, but at this last point where technology has come, surgeries are largely successful. In this article, you can learn how the da Vinci robotic surgery system works and in which surgeries it is used most.

Da Vinci, also known as robot-assisted laparoscopy surgery, is the world’s first and only robotic surgery system. da Vinci robotic surgery system; was developed by researchers working at NASA, engineers specializing in virtual reality, and robot technology experts from Stanford University Research Center. This system was created to operate astronauts in space from the surgeon console around the world in case of need for healthcare.

After the American Food and Drug Administration (FDA) started to be used in cardiovascular surgery operations with the approval given in 2000, more than 8 million operations have been carried out to date. This system, which is widely used in the fields of urology, gynecology, general surgery, thoracic surgery, and ENT (Ear-Nose-Throat), Overtime, has become a frequently preferred method in Turkey. The da Vinci robotic surgery system consists of three parts: the da Vinci robot, the patient console, and the surgeon console. The 4 arms carrying the hand tools to be used in the operation are located in the Robot section. The hand tools at the ends of these arms are inserted into the body through the holes in the skin with a diameter of 0.5-1 cm. One of the arms carries a high-resolution camera that gives the image of the operation field to the outside. The surgeon performs the surgery with the other 3 robotic arms.

CYBER KNIFE

CyberKnife robotic radiosurgery system is a treatment option used to destroy cancerous or non-cancerous cells in any part of the body without the need for surgery. This treatment promises a new life to the patient by giving high radiation doses to the tumor with very high precision.

With CyberKnife, tumors in any part of the body, especially lung, prostate, liver, pancreas, brain, spinal cord are treated. The device is designed to pinpoint the target precisely from many angles around the patient. It protects the surrounding healthy tissue in the best way while treating the diseased area with high accuracy and precision thanks to the advanced imaging technique during the treatment. In this way, the patient is treated comfortably without any incision with the least possible side effects and usually returns home on the same day.



SPECIALIZED TREATMENTS

AESTHETIC, PLASTIC AND RECONSTRUCTIVE SURGERY

Plastic surgery is shaping and reconstruction surgery. In other words, the correction of all kinds of physical disorders, congenital or acquired, is within the scope of this surgery.

Some of the diagnosed and treated conditions are facial deformities–asymmetries, congenital masses, rare facial clefts, cleft lip and palate, craniofacial-maxillofacial anomalies (e.g. jaw, facial and skull deformities, irregularities, deficiencies, orthognathic surgery (jaw closure disorders), absence of auricle, prominent ear and other deformities, nasal defects, tumors, ruptures, salivary gland problems, congenital tumor, nevus (me), masses, vascular malformations, hemangiomas, bone and soft tissue trauma of the face, maxillofacial surgery (bone defects-fractures-shape and function disorders caused by traffic accident, tumor and other reasons, head and neck tumors and repair of their defects, absence, asymmetry or excess breast tissue, breast reconstruction after cancer, gynecomastia (big breast in men), congenital anomalies of the genital organs (epispadias, hypospadias, vaginal agenesis etc.), repairs of genital organs, replantation of ruptured organs, chest and abdominal wall defects, hand surgery (traumas, tumors, finger transfers, finger repair-lengthening etc.), deficiencies and deformities in hand and foot, peripheral nerve problems (traumas, neuropathies, defects, masses), skin and soft tissue tumors, acute burn and post-burn deformities, contractions, contractions, damages caused by electricity and chemicals in soft tissues, skin and subcutaneous wounds caused by various infections, radiation and other effects chronic wounds (pressure sores, venous wounds, diabetic foot wounds)





Surgery Operations

NOSE SURGERY
Deviation (internal curvature) can also be corrected while performing aesthetics.

FACE LIFT AND REJUVENATION
The loosened and sagging facial skin is stretched, giving a younger facial appearance. Neck and forehead wrinkles can also be stretched in the same surgery.

EYELID SURGERIES AND REMOVAL OF CUSTODY BAGS
Excess skin and fat on the lower and upper eyelids are removed and the bags that give the person a tired expression is removed.

BREAST REDUCTION
Patients experiencing problems such as back pain, skin rashes and difficulty in finding clothing due to sagging and large breasts. In addition, these surgeries can be performed on every patient who wants to have a proportional body.

BREAST AUGMENTATION
Silicone implants are applied to normalize underdeveloped or small breasts. Silicone implants are covered with a silicone membrane filled with silicone or saline in a gel texture and also can be made of silicone.

CRANIOFACIAL SURGERY
These surgeries correct any congenital or acquired deformities of the head shape and facial area.

MAXILLOFACIAL SURGERY
Is to correct all kinds of deformities and functional disorders of the soft tissues and facial bones of the face region, congenital or after an accident. Other congenital anomalies such as cleft lip and cleft palate fall into this group. Since the auricle is not partially or completely congenital, the auricle is formed again from the ribs.

MICROSURGICAL OPERATIONS
The methods are used for various purposes and are based on the suturing of very thin vessels and nerves under the operating microscope. Covering open wounds with free tissue transfer, treatment of facial paralysis and replantation of severed limbs are examples of this surgery group.

ONCOLOGICAL RECONSTRUCTIVE SURGERY
Is to correct the functional and deformity caused by removing a tumor from any part of the body. Reconstruction of the breast, reconstruction of the jawbone are examples and it is often performed with the use of microsurgical surgery methods.

HAND SURGERY
Is to correct all kinds of congenital and subsequent functional and deformities of the arm, forearm and hand, nerves, muscles, tendons and bone structures. Wounds: It is possible to close all kinds of simple and complicated wounds with various medical and surgical methods. Chronic wounds, wounds that cannot be closed due to vascular reasons, pressure sores and diabetic wounds are healed.

SPECIALIZED TREATMENTS

BONE MARROW TRANSPLANTATION



PEDIATRIC & ADULT

A bone marrow transplant is a procedure where stem cells are implanted to make healthy blood in the body to replace damaged or diseased bone marrow. In some cases where the bone marrow does not work or cannot produce enough healthy blood cells, a bone marrow transplant is required. There are two types of bone marrow transplants, autologous and allogeneic. Transplants using cells from the human body are called autologous transplants, and transplants from a donor are called allogeneic transplants.

AUTOLOGOUS STEM CELL TRANSPLANT

Autologous stem cell transplant uses healthy blood stem cells in the body to replace the diseased or damaged bone marrow. During stem cell transplantation, using cells from one's own body has some advantages over using stem cells from another person. For example; In autologous stem cell transplants, there is no incompatibility problem between the transplanted cells and the body's own cells.

Autologous bone marrow transplantation may only be an option if the body is producing enough healthy bone marrow cells. These cells can be collected, frozen, and stored for later use. Autologous stem cell transplants are often used in people who need high doses of chemotherapy and radiation. Autologous stem cell transplantation helps replace damaged bone marrow.

Autologous stem cell transplant is mostly used to treat the following conditions:

- Hodgkin lymphoma
- Myeloma
- Non-Hodgkin lymphoma
- Plasma cell disorders

ALLOGENEIC STEM CELL TRANSPLANT

Allogeneic stem cell transplant uses healthy "blood stem cells" from a donor to replace diseased or damaged bone marrow. Allogeneic stem cell transplant is also called allogeneic bone marrow transplant.

Donor; It could be a family member, acquaintance or a stranger. Cells used in allogeneic stem cell transplantation can be collected from different regions as follows:

- From donor's blood
- Bone marrow within the donor's hipbone
- From donated umbilical cord blood

Before allogeneic stem cell transplantation is performed, high doses of chemotherapy or radiation therapy are given to destroy diseased cells and prepare the body for donor cells. An allogeneic stem cell transplant may be an option for people with a variety of diseases, including:

- Acute leukemia
- Adrenoleukodystrophy
- Extreme anemia
- Bone marrow failure syndromes
- Chronic leukemia
- Hemoglobinopathies
- Hodgkin lymphoma
- Immune deficiencies
- Inborn errors of metabolism
- Multiple myeloma
- Myelodysplastic syndromes
- Neuroblastoma
- Non-Hodgkin lymphoma
- Plasma cell disorders
- POEMS syndrome
- Primary amyloidosis



SPECIALIZED TREATMENTS

CANCER

PATIENT SPECIFIC TREATMENT

Developing medical treatment strategies and the correct use of new smart drugs are due to the good interpretation of many scientific data. Before the treatment decision, all available patient, and tumor data are examined in detail and analyzed in line with the globally used guidelines (American guideline; NCCN, European guides; ESMO Guideline, St. Gallen) and the final decision is made by taking the opinion of the oncology council in difficult patients. In the treatment decision, the patient's age, accompanying diseases, individual preferences and psychosocial characteristics are taken into consideration, and the patient's participation in the treatment plan is ensured. Medical treatment of cancer patients is not only about giving the right medicines to the right patient intravenously or orally. The secret is the effort to transfer love, respect for people, hope and trust to the patient and his family.

MEDICAL ONCOLOGY

Medical treatment of cancer is one of the areas with the most innovation and knowledge in recent years. Nowadays, "The One size fits all", that is, the "A single treatment method is good for all patients" model has been abandoned and has been replaced by "individualized treatments". This way, the chance of success has increased with more effective treatments in patients, and unwanted side effects have been avoided.

NUCLEAR MEDICINE APPLICATIONS IN CANCER TREATMENT

Nuclear medicine applications; In addition to diagnosis and staging of cancer, alternative methods are developed for patients who cannot have surgical treatment, this makes a significant contribution to cancer treatments. In addition to the treatments that help the regression of the disease and the prolongation of survival, and the quality of life for patients is increased with successful procedures, especially in cancer pain.

NUCLEAR IMAGING METHODS

PET-TOMOGRAPHY

Today, there is a highly developed technology among imaging methods, and it is an effective method for screening tumors of the whole body. It is often preferred for staging purposes before treatment decision in high-risk patients, for detailed examination of lesions that occur during follow-up and for determining the effectiveness of treatments applied to patients with

metastases. The PET - Tomography in our hospitals use this device which combines TOF technology and HD technology.

CANCER SURGERY

With a well-equipped surgical team, patients in lung, breast, gastrointestinal, gynecological and all other areas are evaluated in the oncology council before surgery. The treatment decisions of the patients are in line with the common opinions of the physicians participating in the council; It is taken into consideration by taking the patient's age, medical and psychosocial status, wishes and expectations into consideration.

RADIOTHERAPY

As in surgery and medical treatment, interdisciplinary communication, and patient treatment decisions are important in radiotherapy. This is extremely important for the success of the treatment that the characteristics of the patient and the tumor data are discussed, the treatment decisions are made in the multidisciplinary oncology council attended by all physicians, and the best technology and comfort are brought together with the patient.

CANCER TREATMENT WITH TRILOGY

Trilogy uses a complex technology that sends highly focused, powerful radiation beams to the exact location of the tumor. Although this technology can be used effectively in various cancer treatments, it is very advantageous in destroying tumor cells near critical organs and is also ideal for the use of second series irradiation of patients who have previously received radiotherapy. Trilogy technology provides the most accurate treatment by offering the best treatment option for each patient.

RADIOMICROSPHERE THERAPY

It is a treatment applied as a radiolabeled resin or using small beads placed on the glass. Its area of application is liver tumors. It is an invasive method targeted at the tumor. There are radioactive materials on the beads that emit very high energy and give high energy within a few millimeters from a short distance. These are applied to the liver in an interventional way; It is intended to settle in the area that feeds the tumor from the capillaries, where it is intended to radioactively destroy the tumor cell and any small metastases in its vicinity at the microscopic level. The procedure, as it is used in preparation for surgery, is preferred in patients who do not benefit from chemotherapy.

CHEMOTHERAPY

Chemotherapy is a treatment for destroying cancer tumors with intravenous drugs. We have about 30 drugs. These contribute to the treatment by killing or at least weakening tumors in targeted tissues. One is given through a vein, and the other one is given to the cerebrospinal fluid and one given to the peritoneum. These are given intravenously, which we use at a rate of 99 percent in practice.

INTRA-ARTERIAL CHEMOTHERAPY

Intra-arterial chemotherapy, which is applied to the patients who do not see the benefit from chemotherapy, is performed by determining the vessels feeding the tumor with angiography and giving intensive chemotherapy by entering the vein interventional. The most important advantage of the procedure for the patient; The side effects are low and the effect of the drug on the tumor is high.

SMART DRUGS AND ANTIBODY TREATMENTS

Cancer Center; In blood cancers, treatment applications with oral pills are successfully applied in some chronic leukemia subgroups where allogeneic transplants are the most common ones. Some diseases that could only be controlled by transplantation in the past can be treated with daily pill therapy. Smart drugs significantly increase the lifespan of patients with many types of blood cancers. Antibody treatments, which are routinely put into practice at the center show among the most important innovations in the world, also increase the life expectancy and quality of life for patients. By recognizing and targeting several antigenic structures in cancerous tissue, methods that only destroy cancerous cells provide significant success, especially in the treatment of lymphomas.

HEMATOLOGICAL CANCER

Hematological cancers; Consist of acute and chronic leukemias, blood, bone marrow, and lymph node cancers, lymphoma, and multiple myeloma. In the center, bone marrow transplantation is applied in these cancers and some solid tumor patients. Bone marrow transplantation can be performed from the patient himself (autologous) or from a relative or non-relative (allogeneic) compatible donor. Within a multidisciplinary approach with the department of internal medicine; The basic treatment and care services of patients are provided by a team experienced in bone marrow transplantation. The treatment of patients is provided in the Stem Cell Transplantation unit against the risks of infection, in single rooms with the heap filter system.

SPECIALIZED TREATMENTS

CARDIOLOGY & CARDIOVASCULAR SURGERY



PEDIATRIC

We categorize the heart diseases we see in childhood into two main groups as congenital and acquired. Unlike adults, most of the heart diseases seen in childhood cause congenital heart diseases structural disorders occur in the early stages of pregnancy when the mother is not even aware that she is pregnant, as a result of the normal development of the heart. Often, it cannot be determined what is the factor that disrupts the normal development of the heart. In addition, heredity and chromosomal abnormalities are among the factors that increase the risk of congenital heart disease (e.g. Down Syndrome).

It is too essential to diagnostic and planning of treatment for this specific group of patients.

Only diagnostic and preop treatment planning improve life quality and expectancy in most patient more than 75% has the possibility to have a normal life.

Pediatric Cardiology

- Echocardiography
- Diagnostic Angiography
- Interventional cardiac catheterization (ASD/VSD/PDA closure; Pulmonary cute balloon dilatation and stent implantation; Pulmonary valve implantation
- Peacemaker implantation
- Rhythm disturbance treatments

Pediatric Cardiovascular Surgery

- Septal defect repairs (ASD VSD AV canal defects)
- Fallot tetralogy surgery
- Shunt procedure
- Fontan surgery
- Newborn heart surgery
- Arterial switch
- Norwood procedure
- Ross procedure
- Valve surgery (repair and replacement)
- Arcus aorta surgery

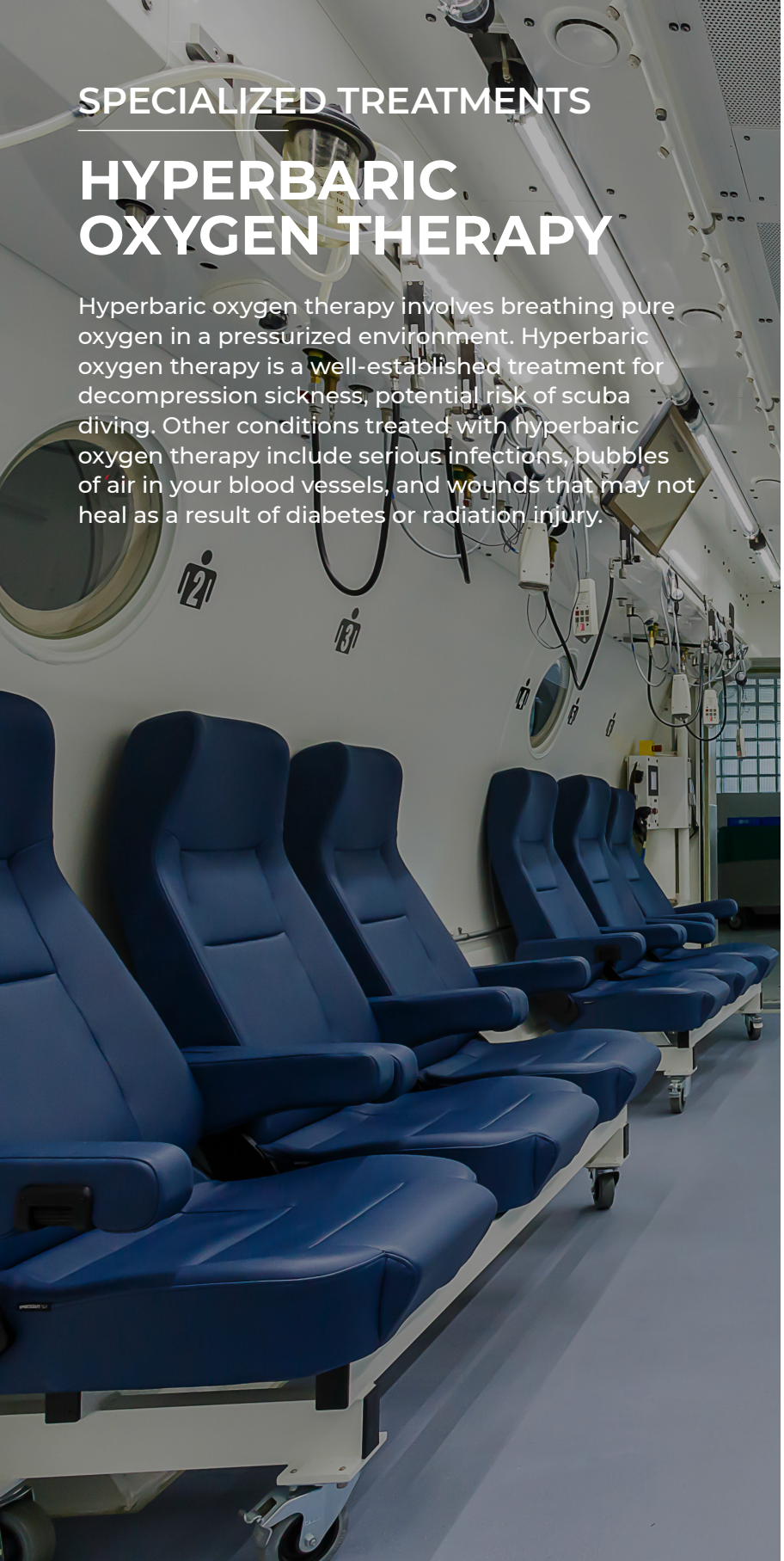
ADULT

Cardiovascular Surgery produces solutions by using all the possibilities of modern medicine for the treatment of diseases related to the heart and the circulatory system it works with. Our doctors, each of whom are specialized in their field, apply the necessary interventions and endovascular methods to get through this process most easily.

Adult Cardiology and Cardiovascular Surgery

- Coronary by-Pass Surgery
- Coronary Angiography (groin/elbow) and angioplasty
- Peripheric angiography and angioplasty
- Arrythmia diagnosis and catheter ablation therapy (radiofrequency/cryoablation)
- Peacemaker implantation (transvenous or surgical)
- ICD implantation
- MitraClip implantation
- TAVI (transaortic valve implantation)
- EVAR (endovascular aneurysm repair)
- Minimal invasive cardiac surgery
- Valve repair and treatment
- Aortic Aneurysm surgery





SPECIALIZED TREATMENTS

HYPERBARIC OXYGEN THERAPY

Hyperbaric oxygen therapy involves breathing pure oxygen in a pressurized environment. Hyperbaric oxygen therapy is a well-established treatment for decompression sickness, potential risk of scuba diving. Other conditions treated with hyperbaric oxygen therapy include serious infections, bubbles of air in your blood vessels, and wounds that may not heal as a result of diabetes or radiation injury.

AVASCULAR NECROSIS

Avascular or otherwise known as aseptic necrosis is defined as the death of bone tissue due to malnutrition. It is frequently seen in the head area of the thigh bone in the leg. Although less common, it can also develop in different parts of the body such as arms, knees, wrists, and feet. Patients usually present with complaints of pain and limitation of movement. Although the cause of the disease is not known precisely, it develops due to the decrease in blood supply in the bone and thus oxygenation. Hyperbaric oxygen therapy (HBOT) is effective by increasing oxygenation, especially in patients with early-stage avascular necrosis. It has been reported that 93% of the patients who received HBOT in the early stage stopped the progression of the disease or recovered completely.

RADIATION NECROSIS

Radiation Necrosis is an undesirable effect that occurs after a short or long time in some of the patients receiving radiotherapy. It can occur with different complaints depending on the area where radiotherapy is applied, the dose of radiotherapy, and the patient's own characteristics. The nutrition and oxygenation of the area where radiotherapy is applied decreases and becomes more sensitive. The self-healing abilities of these regions are also decreasing. Even minor traumas can cause death in these tissues.

Hyperbaric oxygen therapy helps to eliminate the negative effects of radiotherapy on different tissues such as intestines, bladder, skin, brain tissue, genital organs, and bone tissue. This increases the oxygen levels of tissues and supports the formation of new capillaries.

SUSPECTED SKIN FLAPS AND GRAFTS

Skin grafts and flap applications are one of the most frequently used surgical operations in the treatment of non-healing, problematic wounds. It is also known as "skin patch surgeries" colloquially. In people with circulatory disorders, especially diabetics and patients with vascular occlusion, these operations may have a low chance of success.

Low oxygen levels prevent healing in grafts and flaps with suspected involvement. Hyperbaric oxygen therapy significantly increases the success rate of graft and flap operations with its effect of supporting circulation and increasing tissue oxygen. It is applied to prepare the wound area before the operation and to accelerate the healing after the operation.

CHRONIC OSTEOMYELITIS

Osteomyelitis is an infection of bone tissue that results in progressive bone death. Chronic osteomyelitis is defined as the chronicity of this infection due to inadequate treatment for a long time. The disease can persist for months or even years.

In the treatment of chronic osteomyelitis, besides drug applications, wound care, and surgical interventions when necessary, Hyperbaric oxygen therapy (HBOT) significantly increases the chance of success. Success rates reaching 90% with HBOT have been reported in the studies.

HBOT (Hyperbaric oxygen therapy) provides many different and beneficial effects in patients with chronic osteomyelitis. It accelerates wound healing, increases the oxygen level in the bone tissue, increases the effect of some antibiotics, and helps the lesion area to be better blood.

HBOT is applied to patients with chronic osteomyelitis as well as some patients with acute osteomyelitis. It provides successful results in the healing of the bone and wound area in spine, skull bones, and breastbone infections.

CONDITIONS IN WHICH WOUND HEALING IS DELAYED

Causes such as diabetes, vascular occlusion, circulatory failure, and radiation therapy that prevent the healing of the tissues delay the closure of the wounds and ultimately lead to “problematic” wounds that do not heal. Chronic wounds that do not heal for a long time require many different specialties to work together. In addition to wound care, medication, surgical interventions, providing sufficient oxygen to the wound area is one of the important factors for healing.

Chronic wounds are hypoxic, meaning they have low oxygen levels. Especially in patients with diabetes and circulation problems, it is not possible to deliver sufficient oxygen to the wound area. In oxygen-free tissues, “anaerobic” (bacteria grow and these bacteria lead to the development of infection in the scar tissue. With hyperbaric oxygen therapy, it is possible to increase the oxygen levels in the wound tissue to sufficient levels for healing. While the partial pressure of oxygen is 5-20 mmHg in a wound that does not heal under normal conditions, this value can reach 1000-1700 mmHg with hyperbaric oxygen treatment. Hyperbaric oxygen therapy also contributes to the healing of chronic wounds by increasing collagen synthesis, supporting healthy bone tissue and blood circulation, and increasing the effectiveness of some antibiotics.

CRUSH INJURIES, COMPARTMENT SYNDROME AND OTHER ACUTE TRAUMATIC ISCHEMIA

Blood flow in the tissues decreases due to crushing, compression, and prolonged immobility after accidents and disasters such as traffic accidents, trauma, earthquakes. When tissues and organs cannot be supplied with sufficient blood and oxygen, the process results in “necrosis”, ie death. Edema in these tissues is an important problem that prevents healing. Hyperbaric Oxygen Therapy (HBOT) provides a highly successful anti-edematous effect. By reducing edema, increasing oxygen levels, and supporting circulation, HBOT prevents tissue damage and tissue death, especially in ischemic wounds that develop as a result of motor vehicle accidents, gunshot injuries, dents, tight plaster, and bandage applications.

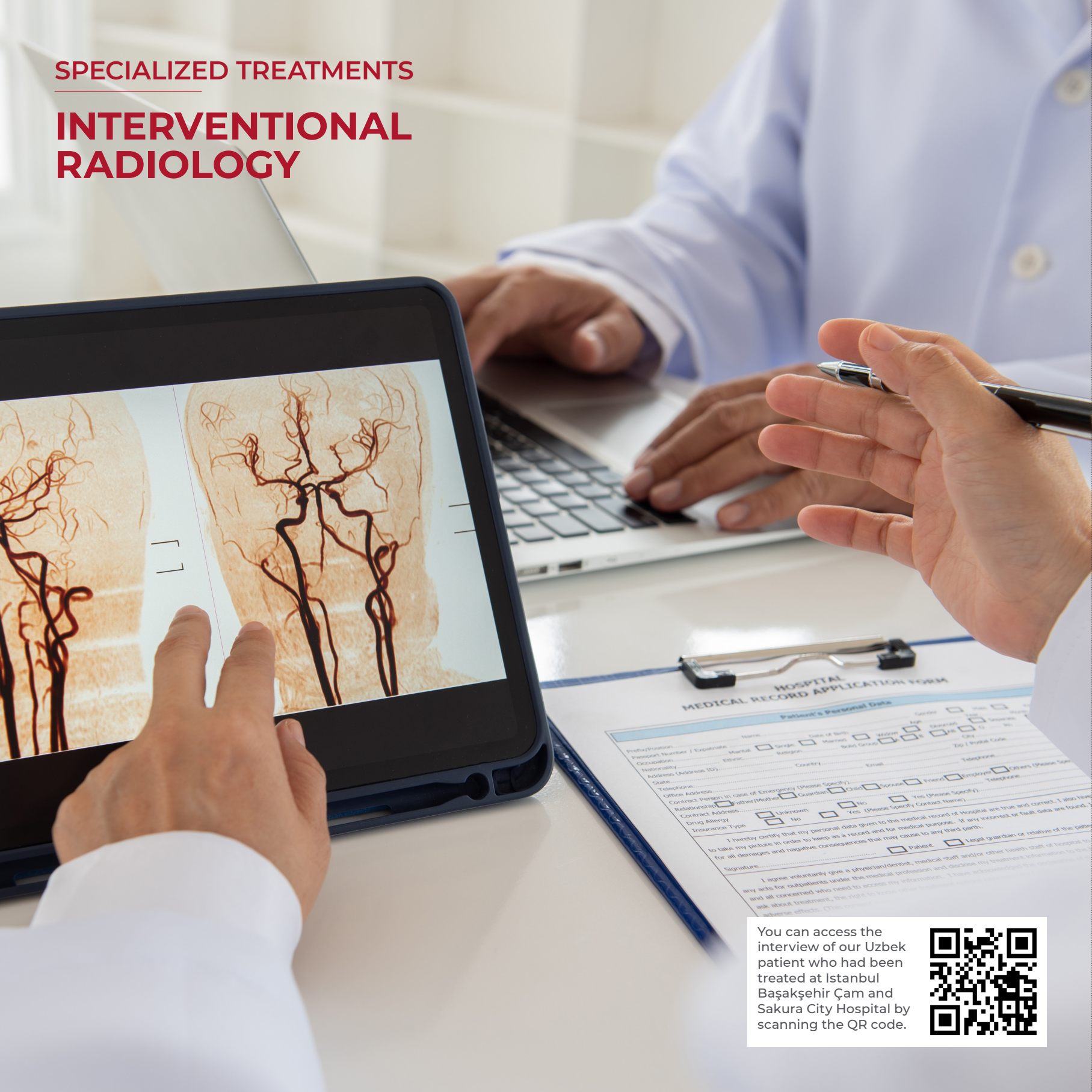
NECROTIZING INFECTIONS

Necrotizing infections are infectious diseases that are uncommon but impair the quality of life and can be life-threatening. Foreign bodies may develop after surgical interventions or trauma, or they may occur without any known cause. Patients often have risk factors such as cancer, diabetes, and immune system disease. In the early period following the injury, pain, edema, a crackling sound to the touch, and a very foul-smelling discharge can be seen.

The common feature of these infections is hypoxia, in other words, oxygen deficiency. It has been shown that the course of the disease is positively affected and the chance of success increases with the hyperbaric oxygen treatment applied in addition to medical and surgical treatments. Hyperbaric oxygen therapy increases the oxygen level, creating an unsuitable environment for bacteria breeding conditions. It enhances the effect of some antibiotics and supports the body’s immune system functions. In anoxic encephalopathy, hyperbaric oxygen therapy allows oxygen to reach the oxygen-free areas of the brain by increasing the level of oxygen dissolved in the brain tissue and reducing brain edema. Patients should be treated as soon as possible, and care should be taken not to interrupt the patient’s other treatments and intensive care needs during hyperbaric oxygen therapy.

SPECIALIZED TREATMENTS

INTERVENTIONAL RADIOLOGY



You can access the interview of our Uzbek patient who had been treated at Istanbul Başakşehir Çam and Sakura City Hospital by scanning the QR code.

Diagnosis and treatment of vascular diseases

Diseases that cause vascular occlusion such as arteriosclerosis (atherosclerosis) and vasculitis (vasculitis) can be diagnosed by angiography and treated with balloon angioplasty and/or stents.

In the interventional radiology department, it is possible to treat hemangioma (vascular ball) and vascular malformations (AVM) with embolization accompanied by angiography. In addition, cerebral aneurysms (bubbles), extremity (limb) aneurysms, aneurysms of visceral veins (visceral aneurysm) and main artery, aortic aneurysms, without the need for surgery, angiography-guided embolization or special stents (endograft, cover stent, flow-guiding stent, etc.) can be cured.

Other diagnostic and treatment methods applied in our department where leg varicose veins can be treated with laser, without surgery, are listed as follows:

- Leg and lower extremity angiography
- Carotid, vertebral, brain and spinal angiography
- Arm (upper extremity) angiography
- Pulmonary (lung) and bronchial angiography
- Renal (kidney) angiography
- Mesenteric vein (intestinal veins angiography)
- Celiac, hepatic (liver) angiography
- Thoracic aorta, abdominal aorta angiography
- Aortic aneurysm (non-surgical treatment with endograft)
- Aneurysm of peripheral and visceral arteries
- Non-surgical treatment of brain aneurysm
- Hemangioma
- Liver hemangioma
- Venous malformations
- Arteriovenous malformations (AVM)
- Lymphangioma
- Lymphocele, lymphocyte
- Peripheric artery disease, stent-balloon angioplasty treatment
- Carotid artery occlusion, treatment with stent, carotid stent
- Leg vascular occlusions (atherosclerosis, Buerger's disease, diabetic foot)
- Mesenteric ischemia, mesenteric thrombolysis
- Renal artery stenosis, renal artery stent
- Laser treatment of varicose veins
- Deep vein thrombosis
- Pulmonary embolism
- Vena cava filter
- Peripheral central vascular access (PICC)
- Central venous catheter (with or without tunnel)
- Non-surgical treatment of varicocele
- Priapism-High Flow Priapism
- Foreign body removal
- Renal vein blood sampling-Renal venous sampling
- Adrenal vein blood sampling-Adrenal venous sampling
- Parathyroid vein blood sampling-Parathyroid venous sampling
- TIPS-Trans jugular Intrahepatic Portosystemic Shunt
- Hemodialysis fistula treatment
- Venous stenosis-occlusion stent

Diagnosis and treatment of bleeding

Treatment of life-threatening bleeding with endovascular (intravenous) embolization is among the important treatment methods of interventional radiology.

Emergency treatment of gastrointestinal system, lung, vaginal, brain, and internal organ bleeding, traumatic and postoperative bleeding is also life-saving. In this context;

- Gastrointestinal bleeding embolization
- Lung bleeding, hemoptysis embolization
- Traumatic bleeding embolization
- Post-operative bleeding
- Bladder-prostate bleeding
- Vaginal bleeding
- Brain hemorrhage, brain aneurysm, brain AVM, subarachnoid hemorrhage

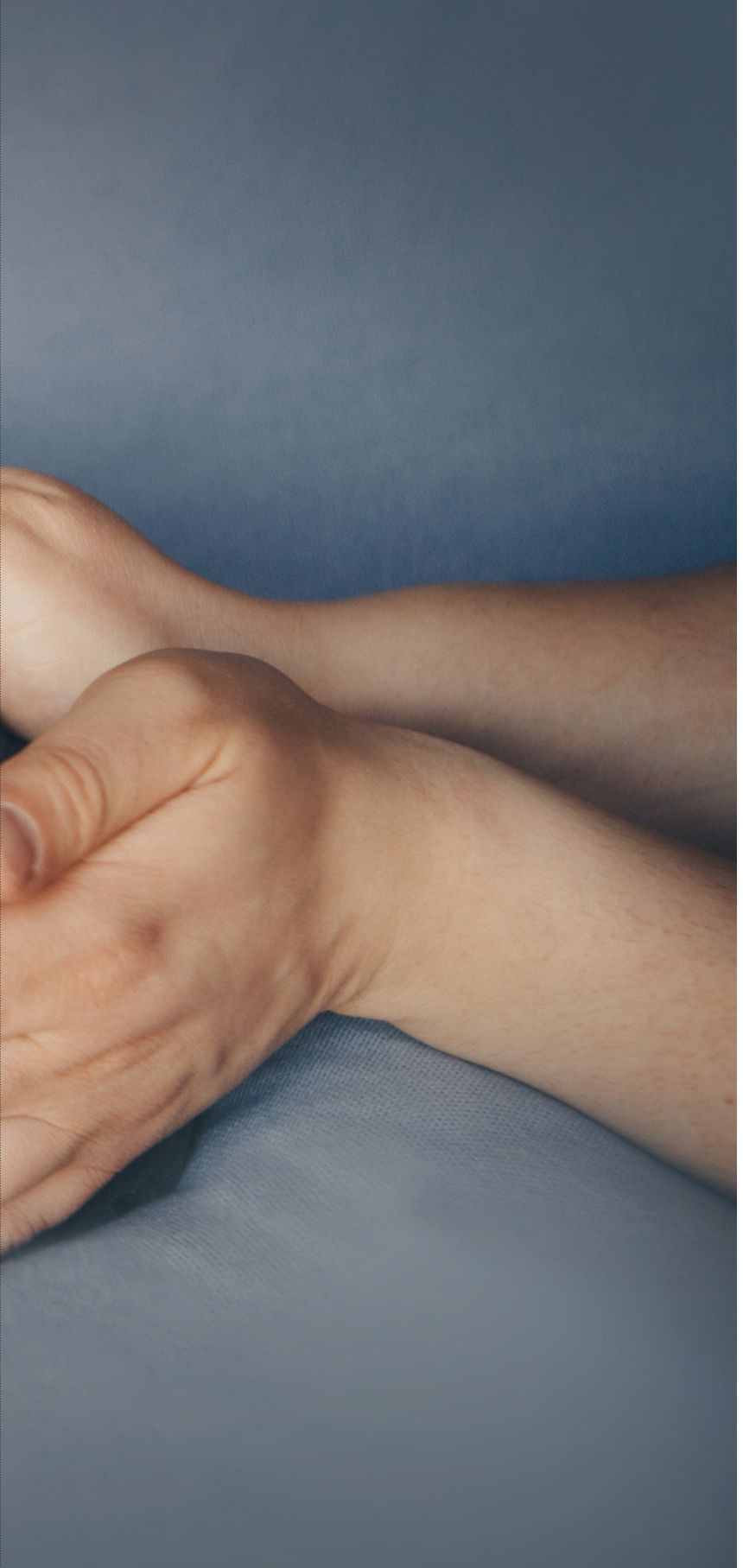
The diagnosis and treatment of bleeding in organs such as the liver, kidney, and spleen are performed.
Treatment of urinary tract obstructions: Performing ultrasound (USG), computed tomography (CT), or nephrostomy under scope in urinary tract obstructions is of great importance, especially for the protection of kidney health in children and babies. This importance increases even more in kidney transplant patients. In this context;

- Nephrostomy
- Ureter stent
- Pediatric (child) nephrostomy applications are performed

SPECIALIZED TREATMENTS

IVF





IN VITRO FERTILIZATION

In vitro fertilization is a successful treatment for many years in couples who cannot have children with natural methods or vaccination. This treatment;

- Unexplained infertility
- Conditions where ovarian reserve is reduced
- Blockages in the tubes in women
- Endometriosis
- Ovulation disorder conditions such as polycystic ovary syndrome
- Low sperm count, and low quality in men

In the presence of genetically transmitted diseases in which examination of the genetic material of the embryo (PGD) is required in one of the couples, it is an effective treatment method in cases of stem cell donor sibling. In IVF treatment, the egg cell taken from the mother and the sperm cells of the father are brought together outside the female reproductive system in the laboratory environment and the embryo is obtained by fertilization. The obtained embryo is placed in the mother's womb with the help of a catheter. In male patients, spermiogram, hormone, genetic tests, if necessary, smear, hormone, and biochemical evaluation, pelvic ultrasonography, uterine film (HSG) or imaging of the uterus with a camera system (hysteroscopy) should be done.

STIMULATION OF THE OVARIES AND FOLLOW-UP OF EGG DEVELOPMENT

The most suitable treatment protocol for the patient is selected with the examination results. In IVF treatment, egg development is provided with hormone drugs given externally. During the use of these hormone drugs, ultrasound and blood tests are performed to monitor the response of the ovaries, that is, egg development, and to make dose adjustments when necessary.

COLLECTION OF EGGS

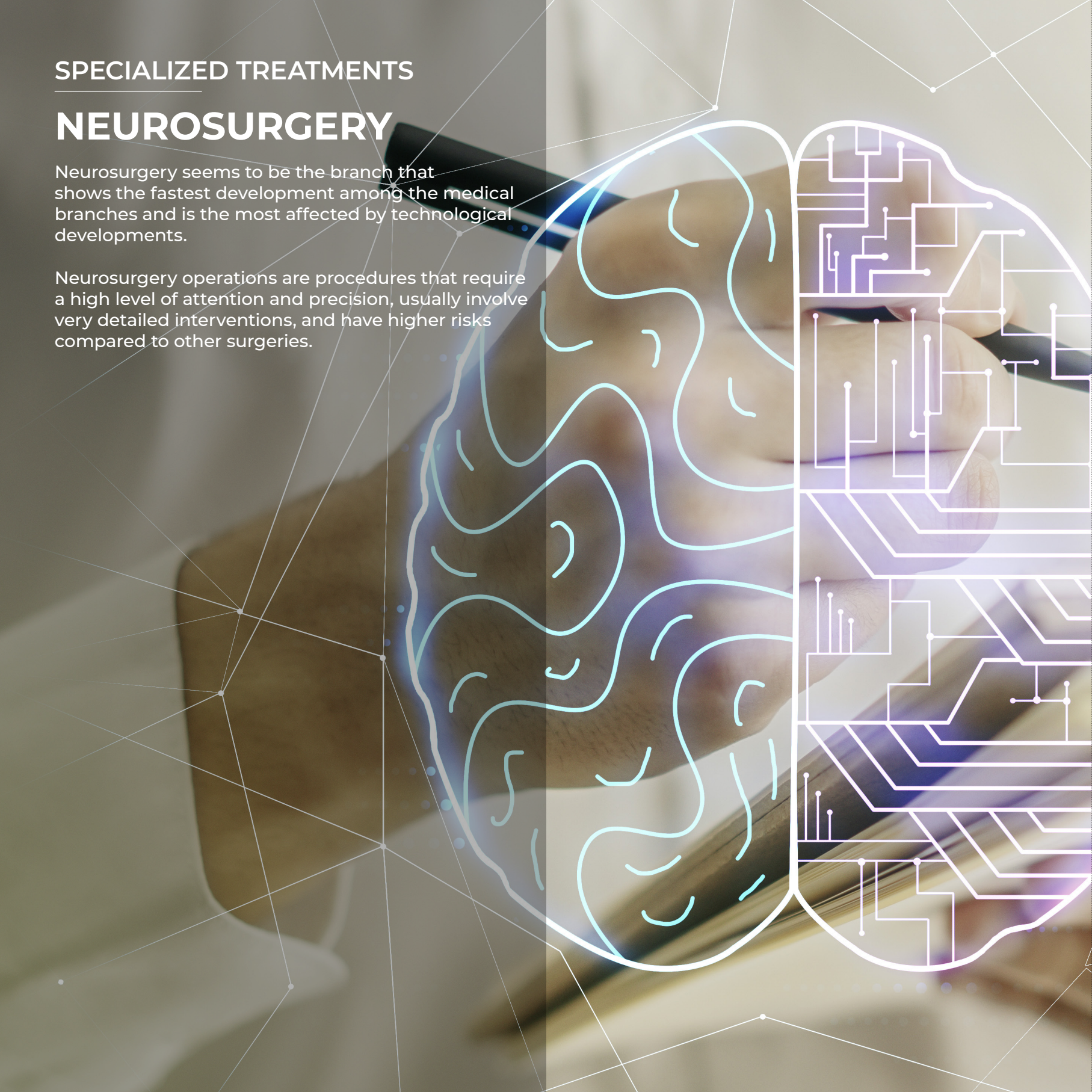
During the follow-up of the egg development, the egg maturation needle is made to complete the final development stage of the eggs on the day when sufficient number and size of eggs are formed, the timing of the egg collection process is planned and preparation is made. On the day of egg collection, the patient is present in the operating room with his wife prepared for anesthesia (hungry). During the procedure, sperm samples are taken from the male simultaneously or, if necessary, sperm is obtained by surgical method. The collected eggs are fertilized in a laboratory environment with the sperm of the spouse using micro injection or one of the classical IVF methods.

SPECIALIZED TREATMENTS

NEUROSURGERY

Neurosurgery seems to be the branch that shows the fastest development among the medical branches and is the most affected by technological developments.

Neurosurgery operations are procedures that require a high level of attention and precision, usually involve very detailed interventions, and have higher risks compared to other surgeries.





Working areas of our Brain and Nerve Surgery department

NEUROONCOLOGICAL SURGERY (BRAIN TUMOR SURGERY)

Surgery is performed to remove brain tumors by surgical intervention. Today, diagnosis and evaluation of brain tumors can be made at an advanced level thanks to the developments in radiological imaging techniques such as high-resolution MRI, tomography, PET, and functional imaging. Operations can be performed with high success and low risk with the help of advanced surgical microscopes, endoscopes, and sensitive microsurgical instruments that assist the surgeon.

Diseases and Surgery

- Tumors of the brain itself or metastatic
- Meningioma (meninges tumors)
- Skull base tumors
- Endoscopic surgery
- Pituitary gland tumors
- Cerebellum and brainstem tumors
- Corner tumors - schwannoma
- Intraventricular tumors
- Skull tumors

NEUROVASCULAR SURGERY (OPERATIONS OF CEREBROVASCULAR DISEASES)

It is the field that includes the surgical treatment of cerebrovascular diseases. Experienced teamwork is required for the diagnosis and treatment of these diseases, which often manifest themselves with cerebral hemorrhage or stroke (paralysis). Imaging examinations such as CT-angiography, MR-angiography, and cerebral angiography are of great importance in the diagnosis and evaluation of these diseases. Therefore, it requires teamwork with experienced radiology and interventional radiology specialists. In addition, advanced patient care, intensive care facilities, and the contribution of an experienced neuro-anesthesia team are required during the treatment process.

SPECIALIZED TREATMENTS

NEUROSURGERY



Examples of diseases and surgical methods evaluated in the field of neurovascular surgery:

- Aneurysm (vascular bubble)
- AVM (arteriovenous malformation) (brain vascular ball)
- Arteriovenous fistula
- Cerebral By-pass surgeries
- Carotid endarterectomy (surgical opening of the carotid artery stenosis)
- Decompressive craniectomy (opening of the skull in stroke patients)
- Parkinson surgery (Deep brain stimulation; Ablative surgery)

PARKINSON SURGERY

Parkinson's disease is a brain disorder that leads to shaking, stiffness, and difficulty with walking, balance, and coordination. Parkinson's symptoms usually begin gradually and get worse over time. As the disease progresses, people may have difficulty walking and talking.

Parkinson's disease is a brain disorder that leads to shaking, stiffness, and difficulty with walking, balance, and coordination. Parkinson's symptoms usually begin gradually and get worse over time. As the disease progresses, people may have difficulty walking and talking.

Deep brain stimulation is one of the device-aided therapies and improves the quality of life in advanced. A specific team chooses and evaluates the candidates for deep brain stimulation surgery. The deep brain stimulation team consists of a movement disorder neurologist, a neurosurgeon, a psychiatrist, a neuroradiologist and an anesthetist.

PEDIATRIC NEUROSURGERY

Since the body structures and functioning of infants and children are different from adults, their surgeries require different approaches. The area of Neurosurgery that focuses on the patient group under the age of 18 is called "Pediatric Neurosurgery". These patients are evaluated in premature, neonatal, infant, child, and adolescent categories according to their age. Each group has its own common diseases and surgical treatment approaches. In addition, close cooperation and teamwork with the Neonatology (Neonatal department) and Pediatrics (Pediatrics departments) are required in the treatment of pediatric patients. However, special equipment designed for the pediatric age group used in surgeries is required.

Examples of diseases and methods that we frequently apply surgical treatment in the field of pediatric neurosurgery:

- Craniosynostosis (head deformity surgeries)
- Spina bifida, meningocele, myelomeningocele surgeries (split spinal cord, congenital spinal cord, congenital outer spinal cord)
- Childhood brain and spinal cord tumors
- Hydrocephalus (accumulation of cerebrospinal fluid in the brain)
- Endoscopic ventriculostomy and tumor surgeries
- Childhood spine diseases

Epilepsy Surgery (Sara disease surgeries):

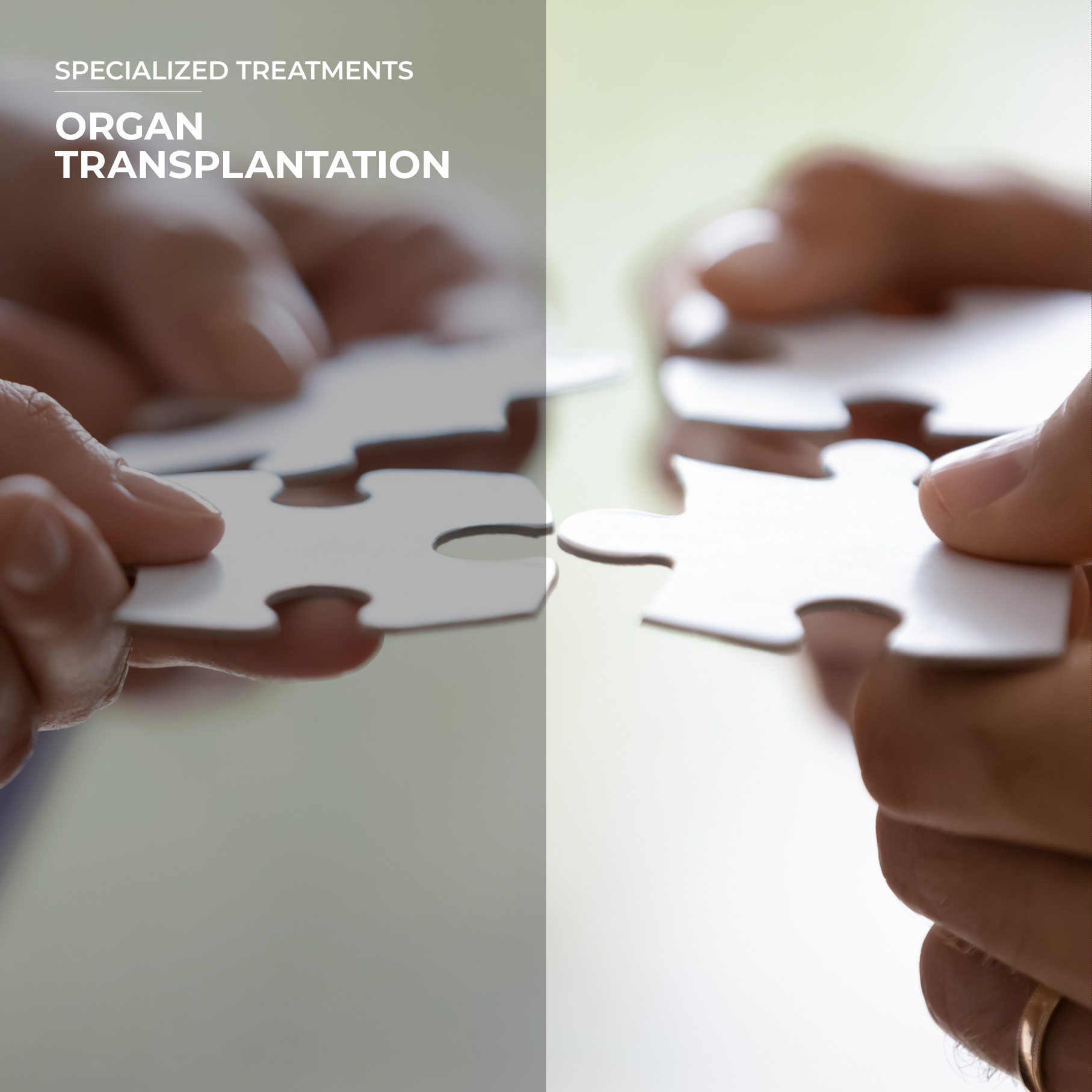
Epilepsy disease is a group of diseases that affect a significant part of society and can seriously restrict functionality. Although there are different types, very good results can be obtained with surgical methods in suitable patients who do not respond to medical treatment.

Examples of surgical methods and diseases applied in the field of epilepsy surgery:

- Temporal lobe epilepsy surgery (amygdalohippocampectomy, temporal lobectomy)
- Lesionectomy (DNET, Cortical dysplasia, low grade glioma)
- Hemispherectomy, functional hemispherectomy
- Corpus callosotomy
- Vagal nerve stimulation (Epilepsy battery)
- Invasive deep and cortical EEG monitoring

SPECIALIZED TREATMENTS

ORGAN TRANSPLANTATION



KIDNEY TRANSPLANT

Our kidneys are 2 organs in the form of beans, located on the back wall of the waist, behind the abdominal organs. The size of a kidney in adults is about the size of a closed fist. The size of each kidney is 125-150 grams.

CHRONIC RENAL FAILURE

This occurs as a result of loss of kidney function for different reasons. Diabetes, high blood pressure, chronic kidney infections, stones, immune system diseases (Glomerulonephritis), long-term use of kidney-damaging drugs (non-steroidal anti-inflammatory, kidney-harmful antibiotics, etc.) can cause chronic kidney failure. It can occur in childhood due to congenital problems in the urinary tract, as well as in different age groups due to diabetes. Chronic kidney failure describes the irreversible loss of kidney function. Depending on the underlying cause, it can occur in patients of all age groups.

A patient diagnosed with end-stage renal disease by a nephrologist should be directed to the nearest organ transplant center without delay. Here, the nephrologist evaluating the patient first evaluates the patient in terms of living donor kidney transplantation.

Relatives of patients who have not yet entered dialysis or who are currently undergoing dialysis treatment whose blood type matches and who do not have blood pressure, diabetes, or kidney disease are determined. The nephrologist directs the patient and possible donor candidates to the organ transplant coordinator. In the center, blood group tests are repeated first and after the LCM study, psychiatric consultation is requested for the patient and his relatives in terms of suitability for organ transplantation.

Patients and donors who have all these tests without problems are examined by nephrology and surgery teams. In our center, tissue compatibility is not considered an indispensable condition for organ transplantation from living beings.

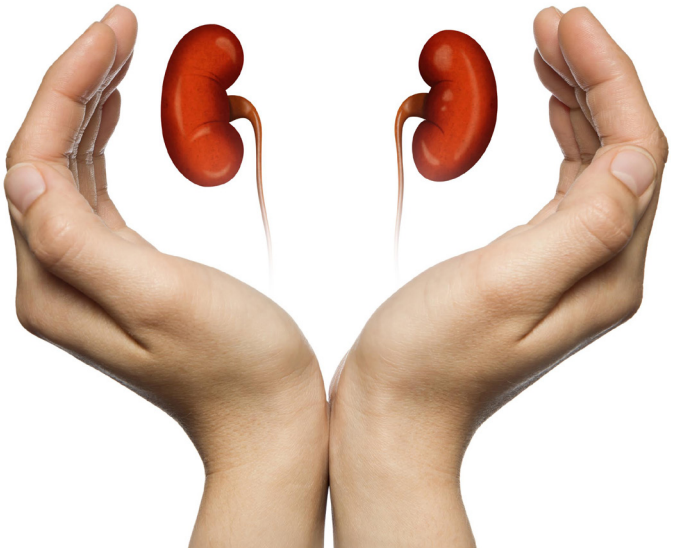
The examinations made are evaluated in the council and the final decision is made by the established council.

BENEFITS OF KIDNEY TRANSPLANTATION

Undoubtedly, kidney transplantation is the best treatment method for end-stage kidney patients. Dialysis methods (hemodialysis or peritoneal dialysis) can do 5% of the work of two kidneys of a healthy person under the best conditions. Successfully transplanted kidney provides 10 times of this (50% of the work done by both kidneys of a healthy person). Most transplant patients feel much more energetic and better than they are on dialysis. While many of them can do their job that they could not do before, their chances of finding a job are higher than dialysis patients. Most of them have a significant improvement in their sexual life compared to the dialysis period, female patients can conceive more easily and give birth to healthy children.

WHAT IS PRE-EMPTIVE KIDNEY TRANSPLANTATION? (TRANSFER WITHOUT DIALYSIS)

Renal filtration (Glomerular filtration rate) is a form of transplantation applied to patients who have decreased below 20 ml/min and have not yet received dialysis treatment. Among the forms of transplantation in this method, the results are the most successful. In this respect, it is very important that patients who have been diagnosed with chronic kidney failure and who are on the way to dialysis (especially those with a rapid progression to end-stage renal failure, such as diabetics), are sent to transplant centers before end-stage renal failure develops and the treatment method (dialysis or transplant) is determined in advance.



SPECIALIZED TREATMENTS

ORGAN TRANSPLANTATION



LIVER TRANSPLANT

The liver is one of the most important organs of our body. The main role of the liver is fulfilling many functions, from digestion to immunity, from nutrient storage to removal of waste from the body and blood clotting. Failure of the liver due to various diseases is called liver failure. After a certain stage, the only solution for liver failure is liver transplantation.

What is Liver Transplant?

Liver transplantation, or as it is called liver transplantation, can be performed from a cadaver or a living donor. Most liver transplantations are performed for cirrhosis. When liver transplantation is performed with a successful operation at the right time, the success rate is very high.

Liver transplantation, for patients whose liver is not working sufficiently and who need organ transplantation; Is the transplantation of a liver taken from a brain-dead cadaver or a living donor. Liver transplantation, which is a life-saving treatment in end-stage liver failure or acute liver failure cases, is performed by general surgery units.

Apart from chronic liver failure and cirrhosis, which is the most common cause of this condition, liver transplantation may also be necessary for the treatment of some hereditary and metabolic diseases. For the operation to be performed, the patient's inadequately functioning liver must be completely removed. The liver part (right or left lobe) suitable for the patient's weight is taken from the donor and transplanted.

Since the liver can regenerate itself in transplantation from a living donor, the donor does not experience any failure after liver transplantation. It is one of the most complicated and tiring operations among operations performed by general surgery units. For this reason, it should be performed in fully equipped hospitals by a specialized transplantation team. Liver transplantation, which is not just an operation; It covers a sensitive process that may require various treatments and meticulous precautions before and after the transplant, and follow-up is also very important.

Who is Liver Transplant Applied to?

Liver transplantation, which is most commonly used in liver failure, is a procedure that may be necessary for the treatment of both acute and chronic failure. Acute liver failure, which develops suddenly in the short term due to the use of various drugs or as a result of fungal diseases, may progress rapidly and require liver transplantation. In addition, liver transplantation is the only solution for chronic liver failure that develops due to nutritional problems, liver cancers, infection or carriage of hepatitis B and C viruses, diseases of the biliary tract, excessive alcohol use, excessive iron accumulation in the body (hemochromatosis) and cirrhosis.

Liver transplantation can also be used in the treatment of rare congenital metabolic diseases. If the life expectancy of patients with end-stage liver cirrhosis is less than one year, it is recommended that patients undergo liver transplantation. Considering factors such as the type of disease, the age of the patient, and the health condition, this process may need to be taken earlier, especially in patients with a living donor. Although it is a difficult process and requires a serious operation, liver transplantation has a high success rate of 75-80% if done on time.



SPECIALIZED TREATMENTS

ORTHOPEDIC AND SPINE SURGERY



You can access the interview of our Russian patient who had been treated at Ankara City Hospital by scanning the QR code.

ORTHOPEDIC SURGERY

Orthopedic surgeons diagnose and treat problems of the joints, bones, ligaments, tendons, muscles, and nerves. Trauma surgery involves treating 'impact' injuries caused by a fall, accident or sports-related injury. These are usually fractures, sprain, dislocations, and soft tissue injuries. Orthopedics offers a wide range of specialist support and has a consultant available for every musculoskeletal problem from elite athletes with sports injuries to those with degenerative and arthritic conditions. Our orthopedic team is made up of highly experienced consultants, and expert technicians who run our advanced test equipment such as x-rays, MRI, ultrasound, and CT scans.

Diagnosed and Treated Diseases

At our city hospitals, the diagnosis and treatment of the following groups of diseases are performed:

- Musculoskeletal trauma; fractures, dislocations, soft tissue injuries
- Spine diseases; Spinal deformities (Scoliosis, kyphosis etc.), spine degenerative diseases etc.
- Shoulder and elbow diseases; Rotator cuff diseases, shoulder instabilities, sports injuries, shoulder degenerative diseases, elbow muscle and tendon injuries (tennis elbow etc.), elbow degeneration
- Knee joint diseases; Meniscus injuries, knee ligament injuries (anterior, posterior cruciate ligament, lateral ligament), patellofemoral joint problems, cartilage injuries, knee degenerative diseases, knee muscle-tendon problems
- Child orthopedics; Developmental hip dysplasia (congenital hip dislocation), pes equinovarus (clubfoot), cerebral palsy, congenital orthopedic diseases and syndromes, Perthes disease etc.
- Lower and upper extremity deformities, short stature
- Hip joint diseases; hip degenerative diseases, femoroacetabular impingement disease, hip dysplasia, femoral head osteonecrosis, hip circumference muscle, and tendon diseases, etc. · Hand and wrist; fractures, tendon injuries, nerve compression (carpal tunnel syndrome, etc.), trigger finger, degeneration of hand joints, hand congenital diseases, hand tumors, nail problems, etc. · Foot and ankle; foot and ankle traumas (ligament injuries, fractures, and dislocations), Prosthesis implantation (knee and hip replacement) Achilles tendon ruptures and diseases, flat feet, joint calcifications, nerve compression, foot and finger deformities (pes cavus, hallux valgus, etc.), cartilage injuries (talus osteochondral lesion, etc.), nail problems. Orthopedic oncology; benign and malignant bone and soft tissue tumors.

SPINAL SURGERY
(Spine and Spinal Cord Surgery)

Spinal surgery is the field that deals with the surgical treatment of diseases in the neck, back, waist, and coccyx region. It includes the surgical treatment of diseases such as hernias in the spinal cord, spinal canal stenosis, spinal slippage, traumas, spinal fractures and dislocations, spinal and spinal cord tumors, congenital curvatures, or structural abnormalities of the spine. In operations, technological opportunities such as spinal surgery tables specially designed for such surgeries, O-arm intraoperative tomography, C-arm scope, neuronavigation, neuromonitoring are used. In addition, teamwork is carried out especially with the Physical Therapy and Rehabilitation clinic during the treatment process of the patients.



Examples of diseases and surgical methods in the field of spinal surgery:

- Lumbar disc herniation
  (herniated disc) (microdiscectomy, screw surgeries)
- Cervical disc herniation
  (neck hernia)
- Thoracic disc herniation
  (neck hernia)
- Spondylolisthesis, spondylolysis
  (slipped waist)
- Spondylosis, narrow channel
  (spinal canal narrowing)
- Spine and spinal cord tumors
- Craniocervical junction diseases
  (Chiari disease - cerebellum prolapse, congenital deformities)
- Spine fractures
- Clivus tumors
- Kyphoplasty, vertebroplasty
  (spine bone filling surgeries)
- Sacro-coccygeal tumors
- Scoliosis surgeries
  (spine curvature correction surgeries)

SPECIALIZED TREATMENTS

OBESITY SURGERY



What is Obesity?

Obesity, or popularly known as “overweight”; Often wrong-unhealthy diet and inactivity -is a life-threatening disease that occurs as a result of excessive accumulation of fat in the body due to lack of physical activity. Besides these factors; Many genetic, environmental, neurological, hormonal, and psychological factors cause obesity.

Obesity; Sets the stage for serious problems such as first Metabolic Syndrome and then Diabetes, Hypertension, Heart Diseases and must be treated.

Obesity and diseases triggered by obesity threaten modern society like an epidemic that we cannot prevent.

Treatment of concomitant diseases such as Type 2 Diabetes, Hypertension, Fatty Liver, Dyslipidemia has expanded the purpose of surgical treatments in obese individuals and the metabolic positive results of the treatment have become as important as losing weight.

Despite the benefits of trying treatment plans equipped with lifestyle changes, planned nutrition programs, and exercise prescriptions before Bariatric / Metabolic Surgery, the most effective and permanent treatment option for Morbid Obese individuals; Is Obesity Surgery.

Obesity is not a problem that cannot be overcome. Just put yourself in safe hands.

How Is Obesity Treated?

Obesity surgery, which is the most effective and permanent treatment option in morbidly obese individuals, should be supported by the teams working on this subject with treatment plans equipped with lifestyle changes, planned nutrition programs, and exercise prescriptions.

“Bariatric Surgery” is used for surgical interventions applied for therapeutic purposes to people who fail to lose weight with the treatment and diet programs applied, have a Body Mass Index (BMI) higher than 40 or BMI higher than 35, and have some chronic diseases and therefore have serious health problems or it is called “Obesity Surgery”.

Who Is Eligible for Obesity Surgery?

Individuals with a Body Mass Index above 40 kg / m2 or BMI above 35 kg / m2 and with at least one concomitant disease are considered surgical candidates.

What is Obesity Surgery?

Obesity Surgery; It is a surgical procedure that offers a lifestyle in which individuals who cannot lose weight by changing their lifestyle, diet, programmed sports and drugs can return to their ideal weight with appropriate surgical intervention, control their risks against chronic problems such as diabetes, cardiovascular diseases, and start enjoying life by making peace with their body.

The most commonly used methods for obesity and metabolic surgery today are **Sleeve Gastrectomy “Tube Stomach”** and **Stomach Bypass** operations.

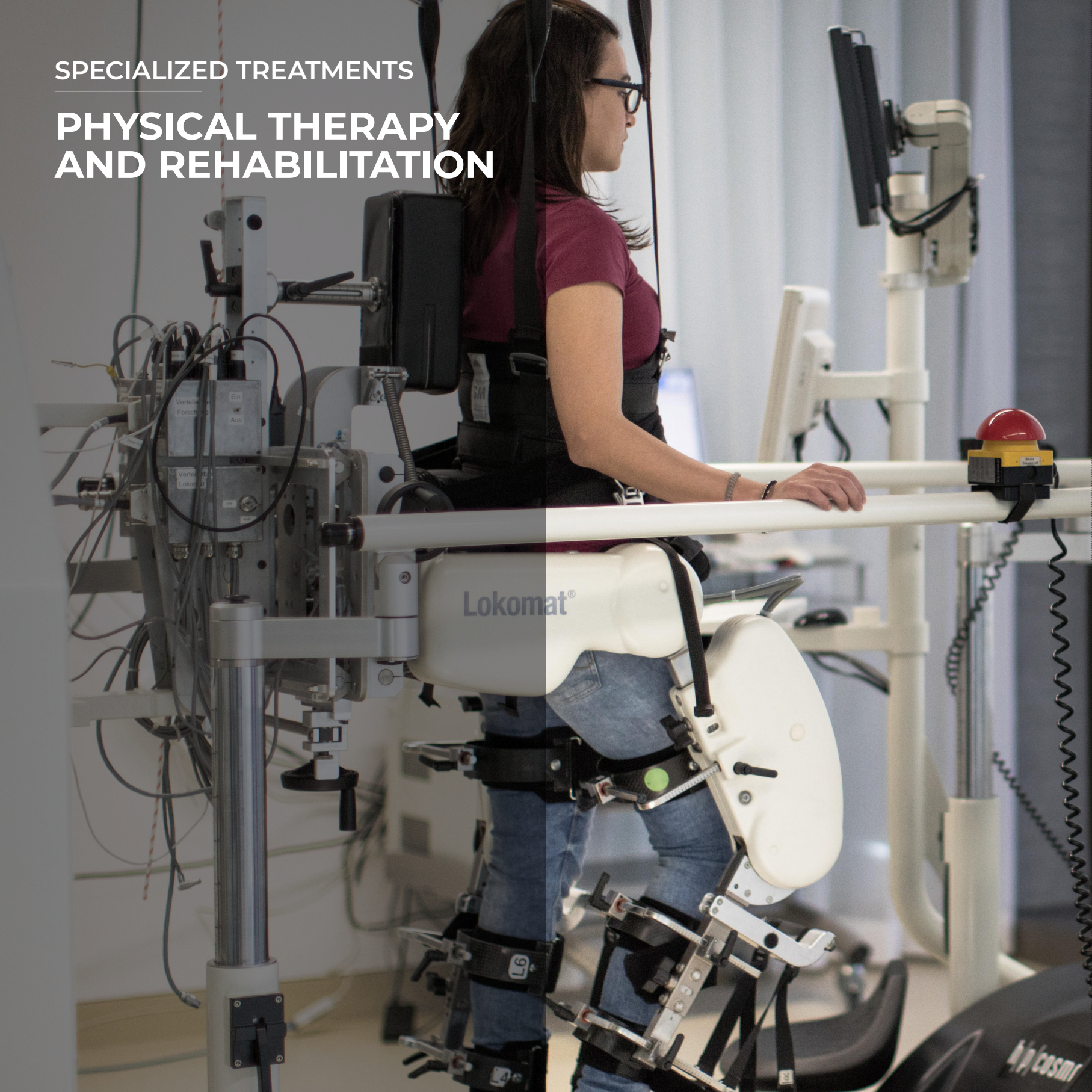
What are the Surgical Operations Performed in Obesity Treatment?

- Stomach Balloon Application
- Tube Stomach Surgery
- By-Pass Methods



SPECIALIZED TREATMENTS

PHYSICAL THERAPY AND REHABILITATION



Physical therapy and rehabilitation; Is a medical science that works with a multidisciplinary approach, which is with other medical branches, to improve and eliminate the disability that affects life and quality of life of the person, effectively returning the patient to his social life.

What is Physical Therapy and Rehabilitation Practices?

Exercise is a treatment method in which the areas of the body where muscles and tissues are weak compared to other parts of the body are strengthened with physical activity and the muscles and skeletal systems of the patients are strengthened. It is used to relieve pain caused by posture, ie posture disorder. In addition, lymphatic flow increasing breathing exercise is also applied.

Electrotherapy is a form of treatment performed to eliminate pain and muscle weakness by using low and high electrical currents. By applying electric currents of different frequencies to the relevant area, edema is reduced, blood circulation is increased and body functions are improved.

Phototherapy is a type of treatment performed by applying laser and UV rays to the right areas.

Hydrotherapy the treatment method with water, the patients are applied hot water bath, contrast bath, treatment with sea water, spa and whirlpool bath.

Manual Therapy is a manual physical therapy method without any medication, device or tool. This type of therapy, which is applied to eliminate problems such as muscle spasm, tension and pain that occur in different parts of the body, recovery is achieved in a short time.

Mechanotherapy is a physical therapy method in which compress applications and manipulations are applied as well as waist and neck pulling movements using different tools.

Thermotherapy this method, which is defined as superficial or deep heat applications to the problematic area, it is a type of treatment performed with hot packs, high-frequency electric currents, in other words, the use of microwaves, high-frequency sound, ultrasound therapy, infrared rays, sun rays and paraffin bath.

Cryotherapy is a type of physical therapy applied to the painful area with a cold-water pack, ice pack, spray, liquid nitrogen, and cold compresses. This method is known as freezing among the people, is applied to acutely developing diseases, to accelerate cellular activity, to improve the connective tissue defined as post-operative connective tissue, and to increase blood circulation.

Robotic Walking Therapy

The most important advantage of the robotic walking system is that it makes movements very similar to normal walking and constantly stimulates the centers in the brain. With this method, the healing process of the patients accelerates and their walking patterns develop in near-normal forms.

- Thanks to longer and intense functional training sessions, rapid advances are achieved incomparably with manual treatments.
- It removes the physical fatigue of the therapist. One therapist is sufficient for use.
- The walking activity of the patient is easily monitored and evaluated.
- The gait pattern and supporting forces can be individually adjusted to the needs of the patient to accommodate functional training.
- Enhanced patient motivation is achieved through visualized performance feedback.
- With computer-aided assessment scales, it is possible to obtain easy and reproducible measurements about patient development.
- If necessary, it can be easily switched from robotic therapy to manual walking training.

SPECIALIZED TREATMENTS

ROBOTIC SURGERY



Da Vinci ROBOTIC SURGERY

The da Vinci robotic surgery system, which has enabled many people to regain their health very quickly since the day it was used in the field of medicine, is a third surgical method used as an alternative to open surgery and laparoscopic surgery.

The da Vinci robotic surgery system, which has important advantages not only for the surgeon but also for the patient, greatly shortens the length of stay in the hospital. Although the word “robot” is included in the name, it causes question marks in many people’s minds, but at this last point where technology has come, surgeries are largely successful. In this article, you can learn how the da Vinci robotic surgery system works and in which surgeries it is used most.

Da Vinci, also known as robot-assisted laparoscopy surgery, is the world’s first and only robotic surgery system. da Vinci robotic surgery system; was developed by researchers working at NASA, engineers specializing in virtual reality, and robot technology experts from Stanford University Research Center. This system was created to operate astronauts in space from the surgeon console around the world in case of need for healthcare.

After the American Food and Drug Administration (FDA) started to be used in cardiovascular surgery operations with the approval given in 2000, more than 8 million operations have been carried out to date. This system, which is widely used in the fields of urology, gynecology, general surgery, thoracic surgery, and ENT (Ear-Nose-Throat), overtime, has become a frequently preferred method in Turkey. The da Vinci robotic surgery system consists of three parts: the da Vinci robot, the patient console, and the surgeon console. The 4 arms carrying the hand tools to be used in the operation are located in the Robot section. The hand tools at the ends of these arms are inserted into the body through the holes in the skin with a diameter of 0.5-1cm. One of the arms carries a high-resolution camera that gives the image of the operation field to the outside. The surgeon performs the surgery with the other 3 robotic arms.

Use of da Vinci Robotic Surgery Method in Surgery
With da Vinci robotic surgery, different operations can be performed in many areas. Some areas where the latest technological systems are used can be listed as follows:

Urological Surgery
Urological surgery is among the areas where the da Vinci system is used the most in Turkey. With this surgical method, prostate, kidney and bladder cancers, UPJ (urinary tract stenosis from the kidney) surgery, kidney transplantation, and adrenal gland tumor surgeries can be performed.

Obesity Surgery
Surgical treatment of obesity is also one of the areas where the da Vinci system is frequently used. This system provides great convenience to the surgeon in cases where there is excess fat tissue in sleeve gastrectomy, gastric by-pass, and switch operations.

Gynecological Surgery
The da Vinci robotic surgery method can be used by gynecologists in the surgical treatment of diseases such as uterine cancer, uterine fibroids, chocolate cyst, uterine prolapse, abnormal uterine bleeding.

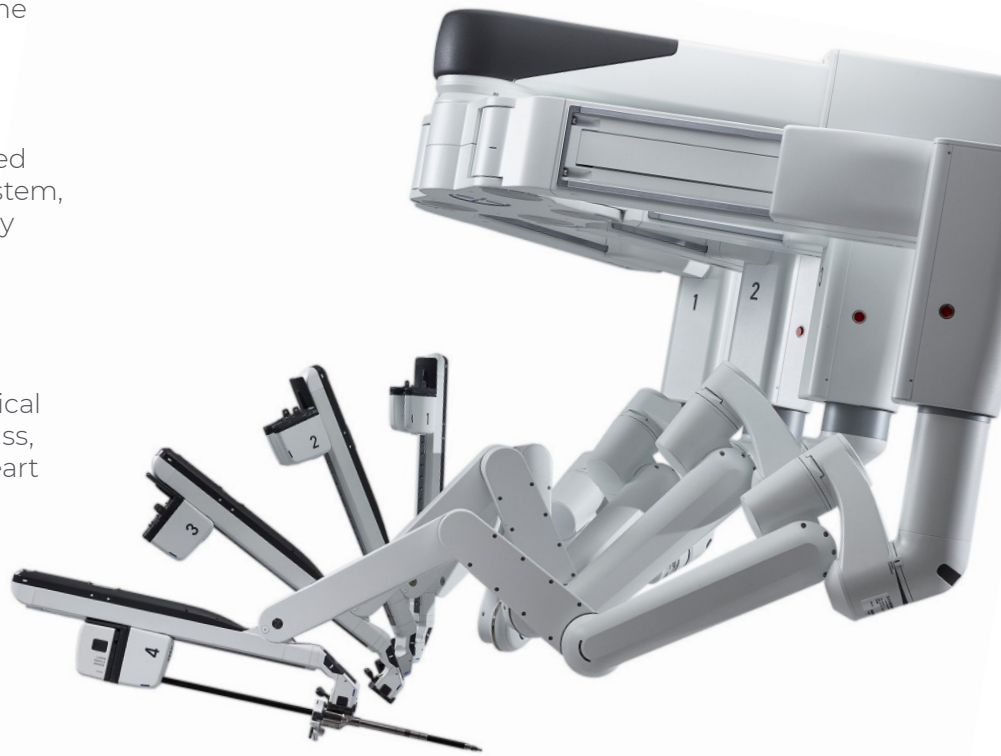
General Surgery
The da Vinci robotic surgery method is a frequently used surgical method in the field of general surgery. This system, which is a product of advanced technology, is especially used in the treatment of colon and rectum cancers, adrenal gland surgeries, and rectal surgery.

Cardiac Surgery
The da Vinci robotic surgery system is among the surgical methods used in surgery types such as coronary by-pass, hole in the heart, mitral valve repair or replacement, heart tumor, tricuspid valve repair.

Thoracic Surgery
Lung cancer and thymoma / thymus gland tumor surgeries can be successfully performed with the robotic system.

Otorhinolaryngology (ENT) and Head and Neck Surgery
The robotic surgery method, which is effectively used in laryngeal, thyroid, pharynx, tongue root, and tonsil cancers, can also be used in the treatment of sleep apnea.

Pediatric Surgery
The da Vinci robotic surgery method is a system that is frequently preferred in pediatric surgery, thanks to its advantages such as less pain after surgery, shorter hospital stay compared to traditional surgical methods, and faster recovery of patients.



SPECIALIZED TREATMENTS

THORACIC SURGERY



The work areas of the thoracic surgery specialist are diseases of the trachea, esophagus, mediastinum, lung and chest wall and related areas. Diagnosis, treatment and surgical interventions of the diseases of these regions are performed by thoracic surgeons. Other organs other than the heart and breast and diseases related to these organs are followed and treated by thoracic surgeons.

Chest surgery diagnosis and treatment methods are varied. Especially with the development of technology, these have diversified and developed. Correct diagnosis is important for the treatment of diseases of organs such as the chest, lung, trachea and esophagus in the thoracic surgery area. For diagnosis, many tests and examinations are applied. For the diagnosis of this department's diseases, diseases are diagnosed using methods that will help diagnosis such as blood and urine tests, imaging procedures (MRI, ultrasound, lung film, tomography), biopsy. As a result of these analyzes and examinations, the treatment and surgical methods to be performed are evaluated. In the thoracic surgery department, surgical methods are generally used in addition to medical treatment. These are surgical treatment procedures for the relevant organ of the disease. Most of the surgeries are performed using robotic and minimally invasive surgical techniques. Some of these surgical procedures are;

- Lung surgeries
- Trachea surgeries
- Esophagus surgeries
- Mediastinum surgeries
- Lung volume reduction surgeries
- Tracheal stent applications
- VATS (Videothoracoscopy) methods

Rib cage surgeries. Apart from these, various surgical procedures can be applied depending on the patient's condition.

Removal of tumor cells in the lung, trachea, esophagus, mediastinum, treatment with stent application for esophageal strictures, treatment with NUSS technique for chest cage problems caused by congenital or post-trauma, treatment by removing the infected lung surface in pulmonary tuberculosis, in emphysema patients volume reduction surgeries, treatment of hyperhidrosis (excessive sweating) diseases with EPS method, lung puncture surgeries and emergency thoracic injuries interventions are performed.

Numerous techniques are used for diagnosis and treatment in thoracic surgery:

Bronchoscopy: It is performed as flexible bronchoscopy and rigid bronchoscopy for the diagnosis and treatment of disorders and tumors in the bronchial system and trachea.

Medianoscopy: It is performed for the diagnosis of tumors in the lungs and lymph nodes and for the staging of the tumors.

Thoracotomy: Opening the rib cage.

Lobectomy: Removing part of the disease area.

Pneumonectomy: One side is the removal of the lung for tumor clearance.

Most of the operations performed in the field of thoracic surgery are now performed with closed surgery technique. Open surgeries are less preferred now. Open surgeries with the VATS (Videothoracoscopic) method have left their place to these video-assisted surgeries. Thanks to these methods, there have been many advantages such as shortening the recovery time of the patients, fewer incisions, and earlier discharge.

The health of the lungs, one of the most important organs of our body, is of vital importance. Lung cancers are at the top of all cancer cases among the cancer cases that have increased especially in recent years. Early diagnosis is the most important factor directly affecting the chances of treatment in lung cancers. The chance of treatment in these cancers diagnosed on time has brought positive improvements thanks to the developing drugs and technologies. Although this is a genetic predisposition factor in the increase in lung and pulmonary pleural cancer cases, the biggest reason is the excessive smoking.

Most of the patients in the chest diseases department, which is one of the most intense polyclinics of hospitals in our country, consist of patients with chronic lung failure due to smoking. Regardless of the reason for the protection of lung health, it should not be neglected to eliminate these causes and to perform controls from chest diseases departments at certain periods for early diagnosis of possible lung diseases.



SPECIALIZED TREATMENTS

CHECK-UP

CHECK-UP

Many health problems and diseases progress insidiously without any symptoms. The symptoms caused by some disorders are thought to be caused by the stress of daily life or fatigue.

Many diseases such as metabolic diseases, liver diseases, kidney function disorders, cardiovascular diseases can progress silently over time and become a major health problem. Check-up, which is one of the advantages of modern medicine, allows the person to take precautions before a health problem occurs or to detect the existing discomfort at the earliest possible period.

This chain of procedures, in which examinations performed by specialist physicians as well as laboratory tests and radiological imaging are performed, are shaped according to the age, gender, genetic inheritance, and risk factors of the person. In other words, while evaluations are made within the scope of preventive medicine for young people, comprehensive screenings are performed to detect many different diseases in the early period in older people. In addition to all these, depending on the current health status of the person, parameters such as obesity, diabetes, lipid metabolism, cardiovascular diseases can be evaluated and possible disorders can be prevented before they occur.

Basic health check-ups can be done on people of all ages, whether they have any complaints or not. Thus, the person can protect his health as well as take precautions in the early period or the existing disease of the person can be treated early.

People who do not have any health problems should be checked-up as a health screening, considering age, genetic inheritance, environmental and risk factors, to prevent possible diseases or to diagnose and treat existing diseases at regular intervals.

MEDICAL DEPARTMENTS

A
- Aesthetic, Plastic and Reconstructive Surgery
- Algology Treatment of Pain
- Allergology
- Andrology
- Audiology

B
- Bacteriology and Microbiology
- Bone Marrow Transplantation Adult
- Bone Marrow Transplantation Pediatric

C
- Check-Up Center
- Clinic Laboratory
- Cardiology
- Cardiovascular Surgery
- Chemotherapy (Medical Oncology)

D
- Dermatology
- Dialysis

E
- Endocrinology and Metabolic Diseases
- Emergency Service

G
- Gastroenterology
- General Surgery
- Gynecology and Obstetrics

H
- Hematology
- Hyperbaric Oxygen Therapy Center

I
- Infectious Diseases Pediatric
- Infectious Diseases and Clinical Microbiology
- Internal Medicine
- Interventional Radiology

K
- Kidney Transplantation

L
- Liver Transplantation

M
- Mammalogy

N
- Nephrology
- Neurology
- Neuroradiology
- Neurosurgery
- Nuclear Medicine

O
- Oncology
- Ophthalmology
- Orthopedics and Traumatology
- Otorhinolaryngology

P
- Pediatric Cardiology
- Pediatric Endocrinology
- Pediatric Gastroenterology
- Pediatric Hematology
- Pediatric Nephrology
- Pediatric Neurology
- Pediatric Oncology
- Pediatric Surgery
- Pediatric Urology
- Perinatology
- Physiotherapy and Rehabilitation
- Psychiatry
- Pulmonology

R
- Radiation Oncology
- Radiology
- Reproductive Medicine & In Vitro Fertilization
- Rheumatology
- Robotic Surgery

T
- Thoracic Surgery

U
- Urology

W
- Wound and Burn Center

INTERNATIONAL PATIENT GUIDE



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09 SUPPORT DURING THE TREATMENT



08 TRANSLATION SERVICES



07 PATIENT ADMISSIONS



06 FLIGHT SUPPORT FOR DOMESTIC LINES



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