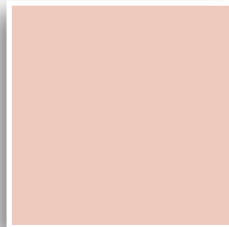
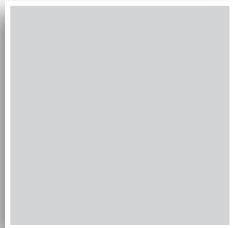
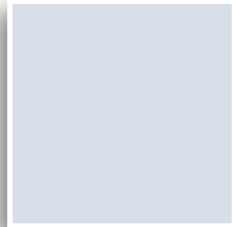




**GAZİOSMANPAŞA
HOSPİTAL**

YENİ YÜZYIL UNIVERSITY GAZİOSMANPASA HOSPİTAL

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YENI YUZYIL UNIVERSITY GAZIOSMANPASA HOSPITAL

Having provided services without compromising on reliability in healthcare since 1992, Gaziosmanpasa Hospital began its cooperation with TR Istanbul Yeni Yuzyil University. The students that chose the Faculty of Medicine at Yeni Yuzyil University will continue their education and research at Yeni Yuzyil University Gaziosmanpasa Hospital. With this cooperation, specialist physicians will be trained better in their fields.

Our University Hospital at the Faculty of Medicine will continue its way with healthcare professionals to whom we can entrust our future, our children and our health, who have the consciousness and their vision, saying "Patients and Healthcare Services First".



COMPANY PROFILE



Gaziosmanpasa Hospital started to provide service with expert physicians for 24 hours in 1992 as the private medical institution offering inpatient treatment in the region. It has always led new applications without compromising on its credibility and it has always been appreciated with its notion of service.

It is one of the leading medical institutions with 60.000 square meters of indoor area, earthquake resistant smart building technology, 12 operating rooms and 350 bed capacity.

With the experienced Organ Transplant Teams in Turkey, It has been conducting Liver Transplants, Kidney-Pancreas Transplants, Pediatric Bone Marrow Transplants, Adult Bone Marrow Transplants and Corneal Transplants. Our Oncology Center is by our patients' side during the cancer treatment with its experienced medical team and Electa Versa HD Radiotherapy device which is found at a limited number of medical institutions. It is proud of and happy having provided healthcare services to almost 4 million people, conducted more than 60.000 operations so far with the most advanced medical technologies in Pediatrical and Adult Cardiovascular Surgery Center, Diagnosis Center for Genetic Diseases, In Vtro Fertilisation Center and fully equipped intensive care units.

Our mission is to be an institution providing services within the international standards, keeping the satisfaction of its patients and employees at the highest level, making constant improvements within the light of the changes based on verifiable research, constantly learning and offering a reliable healthcare service. It has also received a Quality Certificate of ISO 9001-2008 in 2008.



PHYSICAL STRUCTURE

Total area of the hospital: 60.000 m²

Patient Rooms:

- Standard single rooms
- Suit rooms
- Intensive care rooms
- Isolation rooms

Other features:

- A conference hall of 250 people
- Central automation system
- Patient transport system checking heat and moisture for the transported patients
- Guesthouse for patient's relatives coming from another city



INTERNATIONAL PATIENT RELATIONS DEPARTMENT



Gaziosmanpaşa Hospital aims at providing assistance for its patients during pre-treatment, post-treatment and during treatment as well as answering their questions.

As of the very first moment patients get in touch with us, our expert staff makes all the contacts and ensures that the reports provided by the patient are evaluated and that our opinion is offered.

Gaziosmanpaşa Hospital has qualified treatments such as Organ Transfer, Brain and Nerve Surgery, Cardiovascular Surgery, Tumour Surgery, Oncology, Stem Cell Transfer and In Vitro Fertilization. Besides, it also successfully conducts personalized operations such as plastic surgery and hair transplant.

GOP Hospital IPD (International Patients Department) provides services below:

In order to ask for an opinion on the patient's treatment plan, ensuring that the communication between doctor and patient is smooth;

- Ensuring that the communication is made for a secondary opinion and treatment plan;
- Providing required documents so that the patient can make use of the insurance
- Helping the patient to make his treatment plan and travel plan.
- Managing the accommodation and transfer organization upon the request of the patient
- Providing a translator for 24 hours during the treatment period at the hospital
- Managing the check-in and check-out procedures of the patient
- Providing air and land ambulance when necessary
- Helping the procedure with a possible arrant upon the request of the patient

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MULTI-ORGAN TRANSPLANT CENTER

In the Organ Transplant Center which accumulated a significant experience in the area of organ transplant has conducted over 2.000 kidney transplants since 2008. In 2014, its affiliation process with İstanbul Yeni Yuzyil University was completed. Having incorporated the certificate for liver and pancreas transplants besides kidney transplant the university became a Multi Organ Transplant Center. The experience gained in the area of organ transplant especially in immunosuppressive treatments is a key factor for the treatment of the patients with organ failure at higher level of success.

Our Organ Transplant Center with its experienced team and all the equipment offered by the technology works towards making the treatment process easier for our patients and their close ones.



HEART TRANSPLANT AND MECHANICAL HEART SUPPORT SYSTEMS CENTER



Heart transplant is a gold standard method for patients with heart failure; cardiomyopathy. These diseases are diseases such as end stage ischemic heart diseases, non-ischemic heart diseases (congenital heart disease, valvular heart diseases, infectious, postpartum, sarcoidosis, amyloidosis, end stage familial heart diseases, retransplantation) which require heart transplant operations and patients with these diseases can regain their health.

We have a heart transplant, heart failure polyclinic open for service at our adult and children's heart transplant center every day. This polyclinic is the first place that our patients apply. Our heart transplant center has got 9 single rooms and one neonatal intensive care unit. Our patients who are preparing for a heart transplant, the patients who had a heart transplant and the patients who had a mechanical heart support operation stay in these rooms. Our patients are monitored by trained nurses and healthcare personnel for 24 hours in these single rooms. There is an intensive care unit with 7 rooms. This intensive care unit is equipped with laminar flow with Hepa-Fan modules. In this way, it is protected against infections in the best way possible. Patients receive the best treatment possible with intensive care nurses, heart transplant surgeon and his or her assistants and consultant physicians for applicable branches.

Due to the limitations of donor hearts in our country, mechanical heart support systems are also applied to suitable patients for whom no cadaver heart is found. In this way, patients can regain their health.

Among our multi-disciplinary operation rooms, there are 2 operation rooms for heart transplant. In these ultramodern equipped operation rooms, we can actualize all types of heart operations.

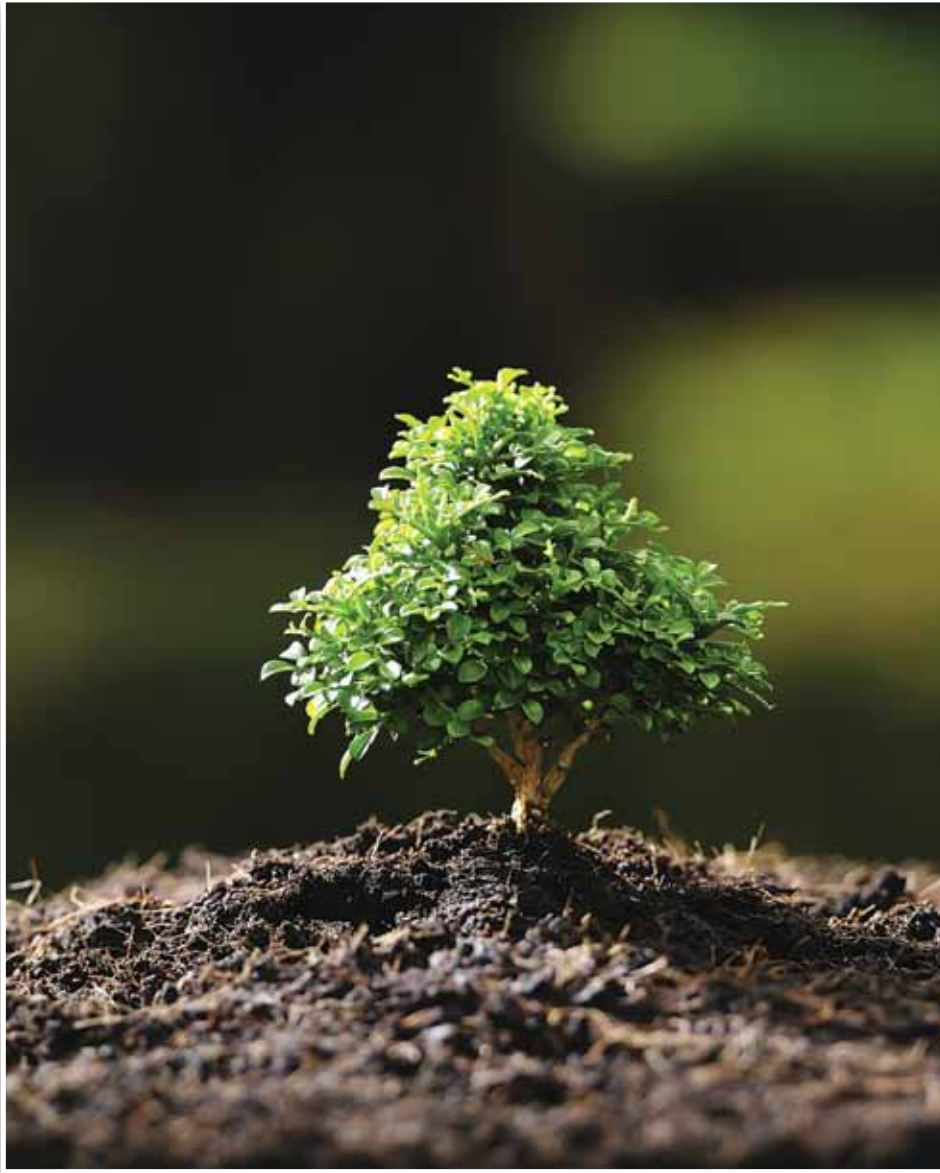
Our heart transplant center is open for service for patients both from Turkey and abroad (with mechanical heart support systems) with its efficient personnel.

LIVER TRANSPLANTATION CENTER

All patients with acute liver failure, liver tumors within the liver transplantation criteria, metabolic diseases and chronic liver diseases (cirrhosis) are subjected for a possible liver transplantation treatment. Liver transplantation is realised by either living related or deceased donor. Deceased donation is only possible for Turkish citizens. For foreign patients living related liver transplantation is the only option.



KIDNEY-PANCREAS TRANSPLANTATION CENTER



Organ transplant is a multidisciplinary treatment. Success can only be achieved through team-work.

We have conducted about 2.000 kidney transplantation in our center.

Transplant preparation period is 4 days

It is the first center with Cross Transplant List in Istanbul.

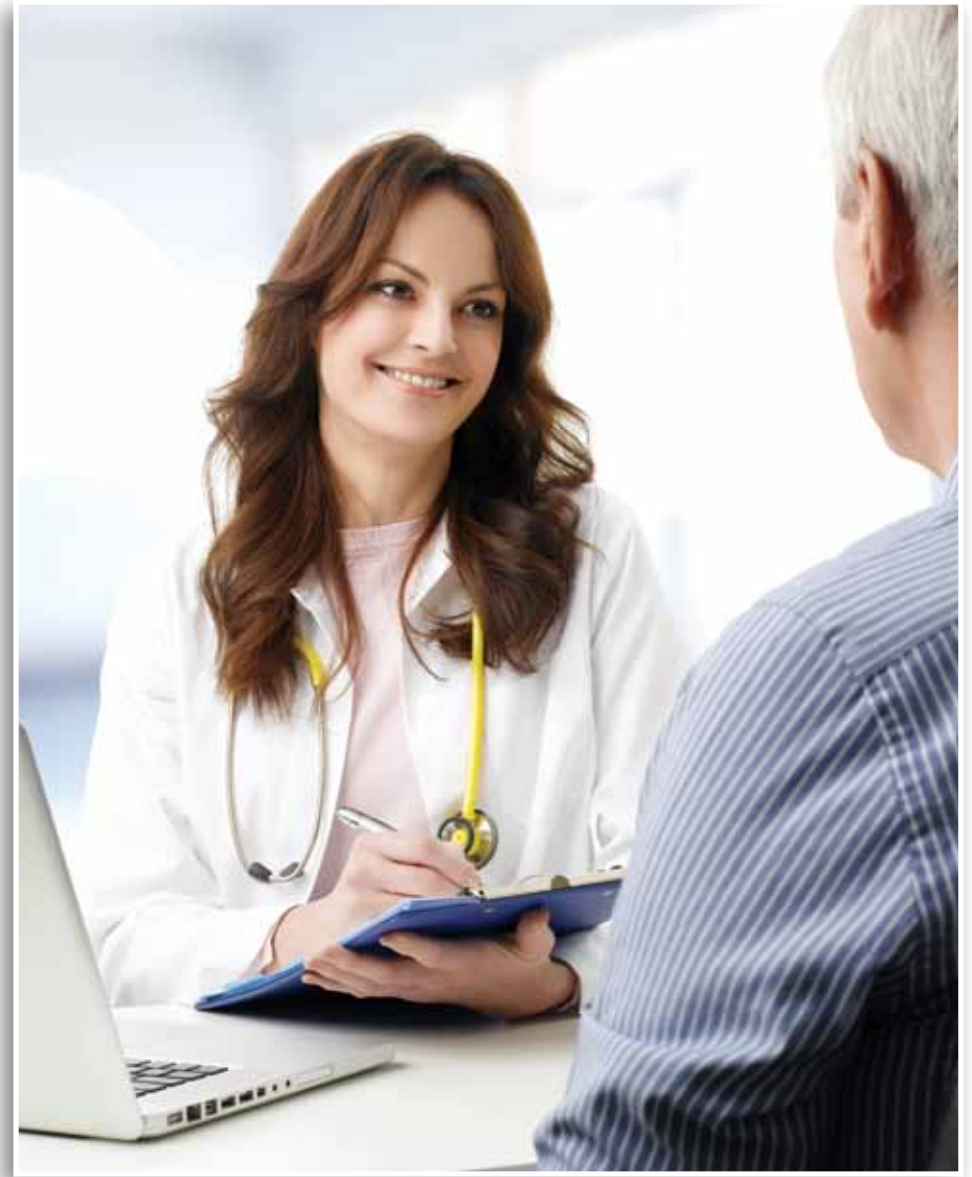
Post-transplant monitoring polyclinic offers service to national and international patients.

The patients with end-stage renal failure who are suffering from Type I Diabetes Mellitus can be treated with pancreas transplant. Although it is rare, it is possible to transplant organs simultaneously from people who passed away to people registered in the waiting list for kidney and pancreas transplants. Another alternative is to transplant the kidney from a living donor and the pancreas from a deceased person. The studies conducted shows that simultaneous kidney and pancreas transplantations yield the best outcomes.

HEPATOPANCREATOBILIARY (HPB) SURGERY CENTER

HPB surgery is still the primary treatment for most of the liver, biliary tree and pancreas tumors. Liver is one of the most common sites for tumor metastasis. The cancerous lesions within the hepatobiliary tree and pancreas gets the biggest benefit from surgery if a complete resection is possible. Liver transplant programs provided contributions for the development of HPB surgery. While liver transplantations with living donors have been fed by the experience obtained in liver and biliary tract surgeries, they have also accumulated a vast experience which will be understood better in this field in the future.

In cases of lesions which are not completely resectable, combined treatment approaches such as radiofrequency ablation simultaneously with the surgery can be applied. The patients with liver metastasis that are not suitable for surgical intervention are candidates for the treatment with radio-embolization if they are suitable according to some certain criteria. HPB surgery is a multi-disciplinary treatment that should be managed along the lines of a team work with medical oncology, radiation oncology and interventional radiology. The success can only be attained through the work of a team of experienced doctors in compliance.



PEDIATRICS BONE MARROW TRANSPLANTATION CENTER



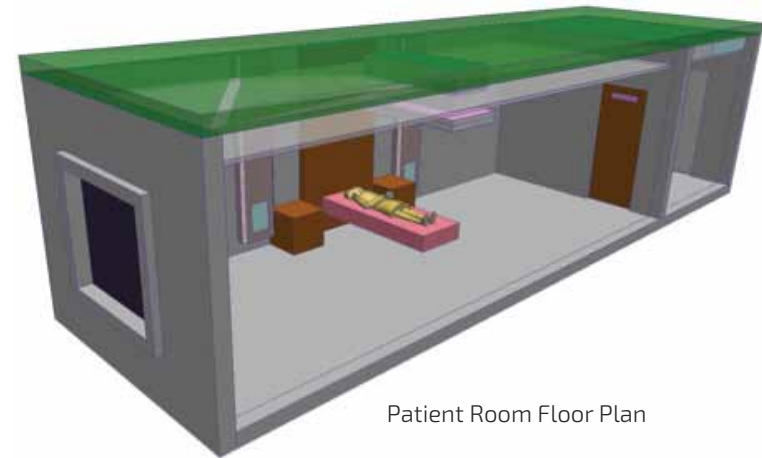
Stem cell transplant is the most important treatment method for certain blood diseases such as thalassemia, sickle cell anemia, aplastic anemia, myeloplastic syndrome; malign syndromes such as leukaemia, lymphoma and solid tumours; immune deficiencies and certain metabolic diseases. Stem cell transplant method is used for the treatment of more and more illnesses every day.

With a population of 75 million, Turkey has been home for 3000 patients having stem cell transplantation. In many centers, patients are waiting for months in order to receive treatment. GOP Paediatric BMT Center was licensed by the Ministry of Health as the 24th BMT center on Dec 29, 2014.

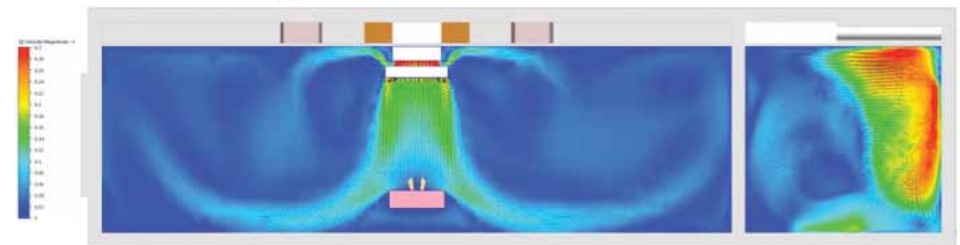
Our paediatric BMT center is the largest BMT center in Turkey, with 17 rooms for one. The largest rooms in our center vary between 22 m² and 30 m². 5 rooms will be used as intensive care. Moreover, all rooms are equipped with the infrastructure required for intensive care.

PEDIATRICS BONE MARROW TRANSPLANTATION CENTER

Clean air system in rooms: Using HEPA-Fan modules and CFD air flow modelling techniques, patient rooms are equipped with ceiling type HEPA filtration system used for the first time in Turkey. Against the infections spreading through air molecules; hybrid flow type is used to ensure the highest protection. In this flow type, laminated air flow is used over the patients' beds and turbulent flow is used for every else in the room. Laminated air flows over the patients' beds and it has a speed profile which will not disturb the patient when it is flowing around the bed. Pressure is adjusted in a way to ensure that the air is directed from the patients' room towards the hospital corridors. Patient protection starts as of the very first moment when the patient enters the service.



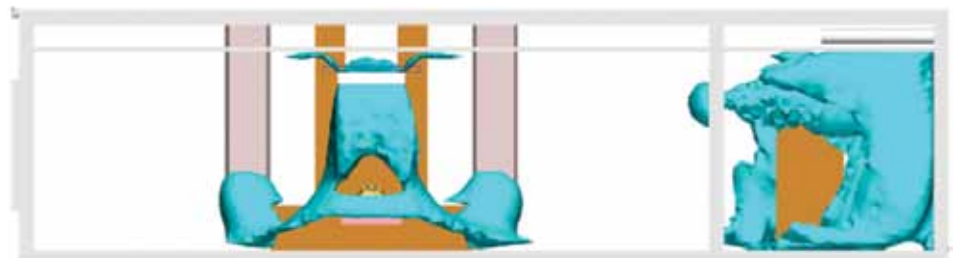
Patient Room Floor Plan



Air Flow Profile In the Room

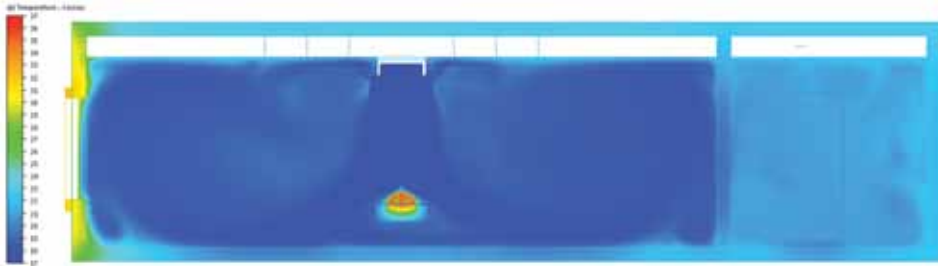


Areas with an air speed above 0,15 m/s

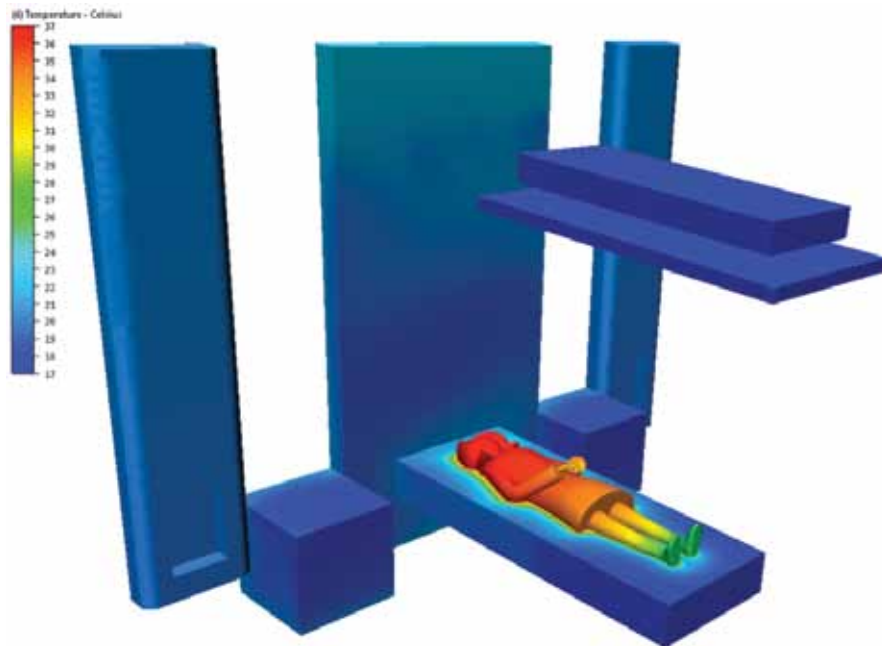


Areas with an air speed above 0,1 m/s

PEDIATRICS BONE MARROW TRANSPLANTATION CENTER



Distribution of Heat In the Room



Heat distribution on and around the patients' bed

The advantages of the system are;

1. The pressure in each room might be adjusted separately. Thus, no pressure problem occurs in systems with a single channel.
2. Thanks to independent air system, infection factors available in a room will not be able to infiltrate into the system or effect the other rooms.
3. Rooms with no patient will run on economy mode and thus it will enable a significant amount of energy savings.
4. Air circuit per hour in every hour might be adjusted between ACH 10 and 18.
5. HEPA filtering system provides a filtration of high efficiency (0,3 μm , %99,97).
6. Thanks to its zero leakage and negative plenum technology, ventilation related infection risks are eliminated in the room. Especially, there is no contaminated air input to the patient room from the suspended roof or surrounding environments.
7. In air channels and on the surfaces of cooling/heating battery surfaces, UV beams provide sterilization.

BONE MARROW TRANSPLANTATION CENTER FOR ADULTS

Stem cell transplant is a life saving treatment method for malign or non-malignant hematologic diseases. This method is used to treat blood disorders such as thalassemia, sickle cell anemia, aplastic anemia, myelodysplastic syndrome; malign illnesses such as leukaemia, lymphoma and solid tumors; immune deficiencies and certain metabolic diseases.

In our transplant center for adults, there are 15 single rooms. Their sizes vary between 22 m² and 30 m². Three rooms will be used as intensive care rooms although all rooms are equipped with the required infrastructure for intensive care. Patients will be monitored by the nurse desk for 24 hours via biometric monitoring system. Patients will be able to contact their relatives over Skype thanks to the internet network provided by the TV screens with internal cameras.

By using HEPA-Fan modules and CFD air flow modelling techniques, ceiling type HEPA filtration system is provided in patient rooms for the first time. Against the infections spreading through aerosols; hybrid flow type is applied in order to provide the best protection. In this flow type, there is a laminar air flow over the patient and a turbulent flow in the rest of the room.

Our transplant center aims at offering services to our patients on national and international scale in a safe, clean and high technology environment equipped with the competent staff.





Thoracic surgery is the branch that is about the surgical treatment of the diseases on organs placed in the thoracic cavity and regions herein other than the heart (such as chest wall, ribs, lung membranes, mediastinum, diaphragm, oesophagus, bronchus).

At our hospital;

- Major lung resections
- Tracheal resections
- Thoracic wall resections
- Videotoschopy (closed lung operations)
- Bronchoscopy
- Extraction of foreign bodies from trachea
- Urgent thorax surgery

are conducted successfully by our experienced medical personnel.

ONCOLOGIC SURGERY CENTER

Within the body of YeniYüzyıl University Gaziosmanpasa Hospital, specialized operations and minimal invasive surgical procedures which take an important place in cancer treatment are conducted within the field of cancer surgery. A multi-disciplinary treatment approach is adopted in the treatment of cancer by surgical means.

At our Neurosurgery Department;

Treatment of spinal cord tumours by surgical means is conducted with minimal invasive methods by using microscopic, endoscopic and navigation techniques.

At our General Surgery Department;

Operations on breast neoplasms, benign and malignant liver tumours and cysts, gall bladder tract tumours, pancreas cysts and tumours, oesophagus cancer, stomach cancer, colon-rectum tumours, anorectal tumours and thyroid cancer are conducted.

At our Thoracic Surgery Department;

Open and closed lung tumour operations are conducted.

At our Bone Marrow Transplantation Department;

Hematologic Tumours and Bone Marrow Transplantation; Diagnosis and treatment of leukaemia, Diagnosis and Treatment of lymphomas, diagnosis and treatment of other hematologic tumours, stem cell transplants from a related or unrelated donor and all types of treatment of benign hematologic diseases.



ONCOLOGIC SURGERY CENTER

At our Women's Health and Gynaecology Department;

At Gynaecological Oncology, treatment of cervical cancers, ovarian cancers, vulva-vaginal cancers and trophoblastic tumours with all advanced technological methods including surgery.

At our Otorhinolaryngology Department;

Surgical treatment of benign and malignant tumours in the head and neck area.

At our Orthopaedics and Traumatology Department;

Medical and surgical treatment of all kinds of tumours primarily on skeletal, muscular and soft tissues on extremities at our Orthopaedic Oncology department.

At our Oncology Center;

Metatarsctomies regarding metastasis treatments on various regions, locaregional treatments on liver metastasis (RF and Radionuclide applications), and advanced treatment methods such as fertility protective approaches are conducted at great success rates.

At our Urology Department;

Urooncology is the subsidiary department of urology that is concerned primarily about kidney, bladder, prostate and testicular cancers, and cancers on other urological organs. The treatment are possible and possible results are achieved once urological cancers are diagnosed at early stages. Therefore, one must apply to this department right away in cases of all types of urinary disorders, if blood is found in urine (especially in cases of presence of clot without any pain), swelling on ovaries together with weight loss and pain in abdominal cavities.



OBESITY AND DIABETIC SURGERY CENTER

According to the World Health Organization, the rate of losing weight in obese patients through diet and exercise is 3%. The most successful method for obesity is surgery.

The surgical procedures used in obesity and diabetic surgery can generally be categorized in three groups:

1. Restrictive Methods:

Among these methods, the most commonly used is sleeve or tube gastrectomy which reduces the gastric volume. The gastric band method, also known as the stomach cuff, is also a restrictive method and its usage is getting less common nowadays. An endoscopically appropriate gastric balloon method is another method.

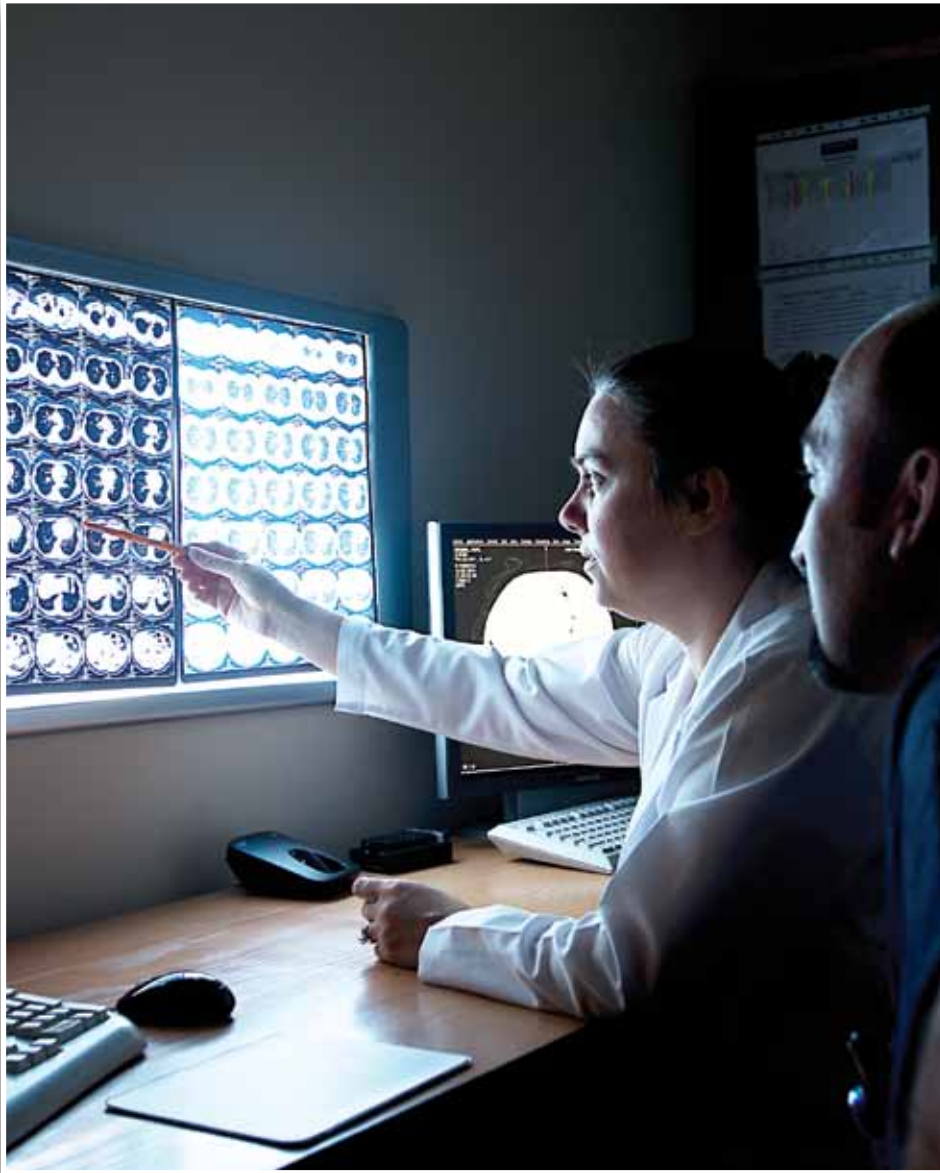
2. Restrictive and Absorbent Disruptive Methods:

Among these methods, the most commonly used methods are Mini Bypass methods, also called gastric bypass and SAGB. By this method, both gastric volume is reduced and the absorption of the food taken is reduced.

3. Pure Absorption Disruptive Methods:

These include BPD, SADI, etc. The absorption of food is fully prevented. Both the volume of the stomach and the absorption of the food taken are reduced.





64 Slice Computed Tomography (Coroner angiography in 10 seconds without a catheter, lung cancer scanning in 20 seconds, virtual colonoscopy in 2 minutes)

- Cat scan
- MRI
- Bone Density Measurement
- Digital Fluoroscopy
- Digital Direct X-ray
- Digital Mammography
- Colour Doppler Ultrasonography Results
- Ultrasonography
- Interventional Radiology and Peripheral Angiography

PERIPHERAL ANGIOGRAPHY AND NON-INVASIVE RADIOLOGY

- 4-dimensional imaging of anterior arteries in real time
- Placement of every type of arterial stenting (multi-purpose metallic stents) and balloon dilation
- Biopsy processing for internal organs

ROBOTIC REHABILITATION CENTER

EXOSKELETAL ROBOT (EXO)

Exo is a training robot for walking aimed to be used under observation for the following types of patients

- Weakness in lower extremities
- Paraplegic patients
- Complete Spinal Cord (up to level C7)
- Incomplete Spinal Cord (at any level)
- Apoplexy
- MS
- Guillain Barre Syndrome

An advanced form of exoskeletal type devices which is also known as "wearable robot" is started to be used at our Robotic Rehabilitation Center at the same time with America. Robotic technologies are recently used in various fields of medicine. The recovery period is shortened by means of various initiatives or operations with the help of robotics. And one of the fields where robotics are used is the rehabilitation. There are various models of robotics for patients unable to use their arms or legs.



ROBOTIC REHABILITATION CENTER



REHA TECHNOLOGY GEO SYSTEM

GEO Systems have an infrastructure that enables the patients with paralysis on various grounds not just flat surfaces. They even have stair-climbing or down-doing features. Preparation and application procedures for the patients are extremely convenient and simple. Crutches or other aids must be used during walking to provide balance in patients with paraplegia. In order to be able to use this device on one's own, one must have the adequate strength and balance to sit on one's own on a wheelchair or similarly to stand up from this chair. Patients are taken into this program only after being assessed in details medically, and the candidates who are going to use this do have to complete the compliance practices.

Most common complaints where GEO SYSTEM walking aid is used are:

- Hemiplegia induced by apoplexy at the beginning
- Spinal cord paralysis
- Multiple sclerosis
- Degenerative diseases such as ALS
- Spastic paralyzes in children (cerebral palsy)*

*Children are easily suitable for this treatment, they participate in a very eager manner in games in a virtual environment and therefore the efficiency of the treatment increases.

GENETIC DISEASES DIAGNOSIS CENTER

Our Genetic Diagnosis Center aims to provide qualified and reliable genetic consultancy and testing services with more than 20 years of experience and modern device park and it is aimed to provide such services in the prevention and diagnosis of all kinds of genetic diseases starting from the pre-pregnancy period.

Our center is an institution accredited by the international organizations such as INSTAND e.V, RfB, CEQAS (Cytogenomics External Quality Assessment Service), CAP (College of American Pathologists) and MOTAKK based on genetic tests.

Our Genetic Diseases Diagnosis Center has become one of the most significant elements of preventive medicine with the help of prenatal and pre-implantation genetic diagnosis methods for the detection of the high risk group of the individuals or families for a genetic disease and for taking measures that will minimize such risks of next generations.

Our Genetic Diseases Diagnosis Center provides all cytogenetic and molecular genetics services from a single sample in accordance with the indication in all branches, primarily hemato-oncology, gynecology, pediatric diseases.





Clinical Exosomal Analysis and NGS (Next Generation Sequencing Next Generation Sequencing) Panels

Clinical exosome and NGS panel testing services where more than one gene is analyzed at the same time in our center are being provided. It is aimed to identify problematic genes and diagnose patients who suffer genetic, metabolic/ neurometabolic diseases which have been subject to detailed clinical and laboratory evaluation and not yet been diagnosed.

NGS Test Panels

- Cancer Genetics Panels (Comprehensive Screening of Breast and Ovary Cancer, Hereditary Cancers)
- Neurology (Neuropathies, Neuromuscular Diseases, Arthrogryposis ...)
- Cardiovascular (Cardiomyopathy, Arrhythmia, Vascular & Connective Tissue Diseases ...)
- Endocrine Disorders (Diabetes-Obesity, MODY ...)
- Hematology (Bone Marrow Deficiency, Coagulation Deficiencies, Thrombosis ...)
- Metabolic Disorders (Glycogen Storage Disorders, Lysosomal Storage Disorders ...)

Preimplantation Genetic Diagnosis (PGD)

Our Center provides Next Generation Sequencing technology with high-level diagnostic services through maternal blood-fetal diagnostic tests, PGD applications for chromosome or single gene disorders (all single gene disorders with known mutations such as thalassemia, Cystic fibrosis, and HLA tissue compatible diseases).

PET / CT

It is a field that makes the treatment and diagnosis of the diseases by means of radioactive substances and thus it takes the image of many organs and tissues.

Thyroid scintigraphy, parathyroid scintigraphy, myocardium perfusion scintigraphy, GATED myocardium perfusion scintigraphy, kidney parenchyma and function scintigraphy, bone scintigraphy, gastroesophageal reflux scintigraphy, liver blood pool (hemanjiom) scintigraphy, Lung perfusion/Ventilation scintigraphy, tumor imaging with MIGB, lenfomscintigraphy

Due to an increasing need for glucoses resulting from an uncontrolled cell division in tumour tissue – in comparison to normal healthy cells; evaluations are done by detecting FDG - a glucoses type in the medication we provide- in tumour cells in comparison to normal healthy cells.

PET/CT is a device consisted of a hybrid/two screening devices requiring special medication sensitive to changes in the metabolism before any structural changes occur in the tissues.

- Detecting whether the masses suspected for cancer are malign or benign,
- Detecting how spread the disease is in patients diagnosed with cancer,
- Detecting cancer recurrence or how the patient responds to the treatment in the follow-up process for the patients diagnosed with cancer
- Other than oncology, evaluating epilepsy patients planned to be operated and diagnosing a patient with Alzheimer
- Evaluating the presence of viability in infarction area of myocardium tissue

SIEMENS biography mCT PET/CT established for this purpose in our hospital has ultra HD visual quality in our hospital and its CT provides a very good visual quality in very low radiation doses and its PET is the latest technology device with a volumetric resolution of 2 mm and 87 mm³. Our hospital offers service with its expert and experienced team.



RADIATION ONCOLOGY / RADIOTHERAPY



In radiotherapy treatment, the most important element for a successful treatment is the technology of the device and that the doctor is an expert in radiation oncology.

Linear accelerator (Linac) used in our clinic is VERSA HD – a first in Turkey, used in a few centers in the world. VERSA HD, is the brand new generation beam treatment technology and a pioneer for certain tumour treatments.

VERSA HD is a very advanced system that knows the patient; that positions the patient and offers ultimate security; that preserves the healthy tissue while beaming the tissue with tumours before and during the treatment thanks to its monitoring feature. Thanks to CATALYST and SENTINEL patient monitoring system working integrated with the system, it is possible to treat the patient with a sensitivity even in millimetre levels for mobile tumours as well as to conduct radiosurgery (surgery via beaming) for certain patients.

In addition to conventional radiotherapy; VERSA HD,

- IMRT (Intensity Modulated Radiotherapy)
- V-MAT (Volumetric Modulated Arc Therapy)
- FFF (High Dose Speed)
- SRS (Stereotactic radiosurgery)
- SBRT (Stereotactic body radiotherapy)
- IGRT (Image Guided Radiation Therapy)
- Respiratory Gating for Radiotherapy (Gating)
- ART (Adaptive Radiotherapy)

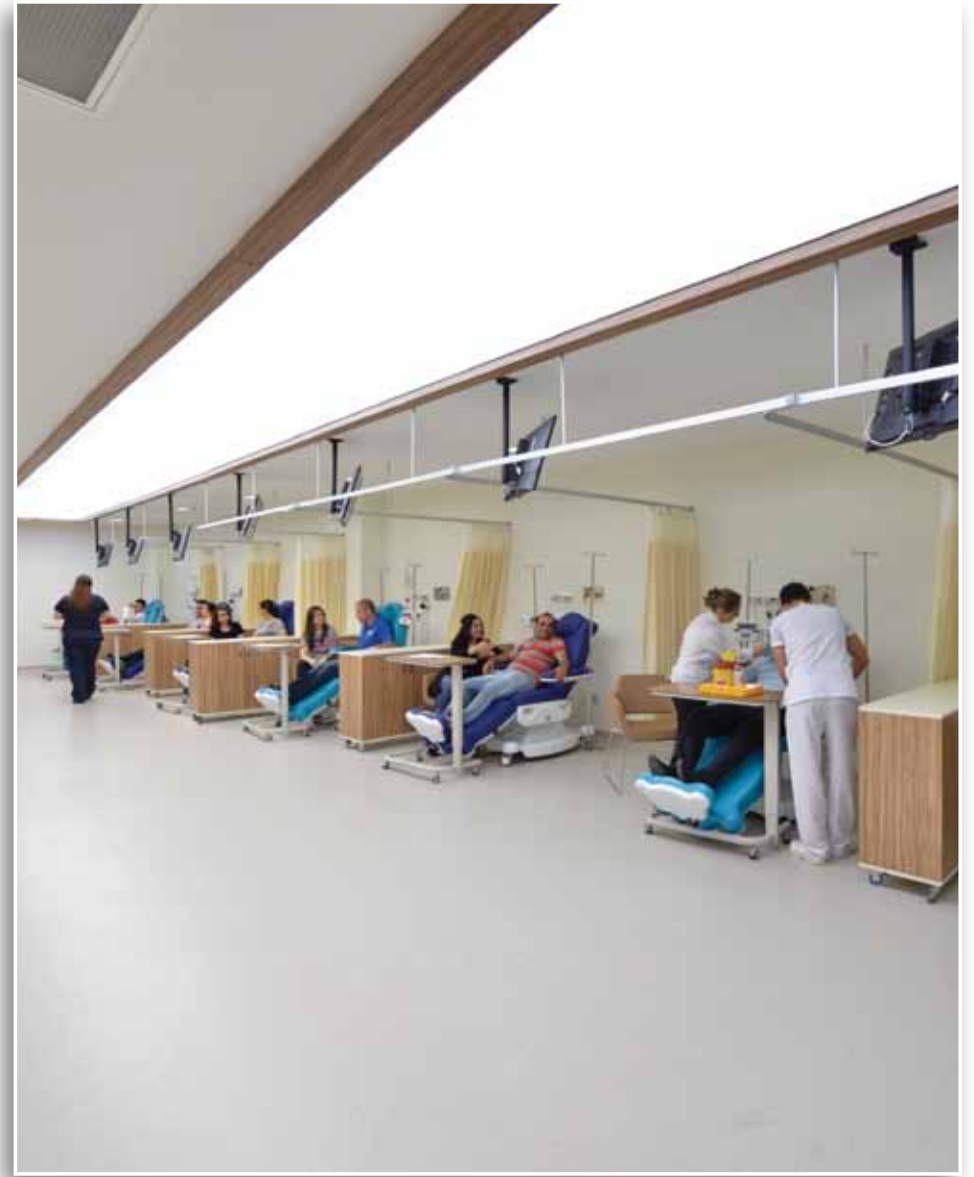
Such above special treatments which can only be done with radiotherapy devices can be applied. Thus, it is ensured that the patient receives the right dose without damaging the surrounding tissues in a way faster in comparison to other devices, which increases the efficiency of the treatment and reduces the side effects.

MEDICAL ONCOLOGY / CHEMOTHERAPY

During the treatment process of oncology patients, a close cooperation between different areas of expertise are required such as medical oncology (chemotherapy), radiation oncology, surgery, nuclear medicine (PET-CT), radiology, biochemistry, pathology and genetics.

In our hospital, thanks to the cooperation between all units; it is ensured that the patient is treated in the most efficient way with the right diagnosis and in the standards of developed countries by considering all innovative treatment approaches.

As a result of the evaluations made in our clinic, a special treatment program is prepared uniquely for the patient and his illness. This treatment program might include chemotherapy, hormone therapy, immunotherapy and other target-based therapies. The patient is directed to the relevant clinic for applications requiring different expertise such as radiotherapy and interventional procedures.





Methods used in the diagnosis of heart diseases:

- Electrocardiography (EKG)
- Echocardiography, TEE
- Stress echocardiography
- Rhythm and blood pressure Holter
- Effort test
- Multi-slice computerized tomography
- Scintigraphic diagnosis
- Electrophysiological survey
- Coronary angiography

Methods used in the treatment of heart diseases:

- PTCA and stent implementation
- PMBV
- ASD, VSD, PDA sealing
- Ablation
- Permanent pace-maker and ICD implementation

CARDIOVASCULAR SURGERY

- Coronary revascularization (Coronary By-pass operations)
- Left ventricular aneurysm repairs
- Cardiac valve (aorta, mitral and tricuspid valves) repair and replacement surgeries
- Aorta aneurysm operations (ascending, descending and abdominal aorta aneurysm repairs)
- Peripheral phlebotomy
- Removing tumours from the heart
- Pericardiectomy in pericard patients
- Pacemaker implantation that has to be implanted surgically
- Repair in natal heart abnormalities (surgeries such as ASD, USD, Tetralogy, transposition, tricuspid atresia, pulmonary atresia etc.)

Aorta bi-femoral stand procedure via Multidisciplinary approaches (Cardiology, CVS and Radiology)



PEDIATRIC CARDIOVASCULAR SURGERY



All types of heart surgeries can be conducted at our Cardiovascular Surgery Unit including new-born heart surgeries. All types of cardiac valve (conduit) operations can also be conducted successfully in heart surgeries for the new-born and children.

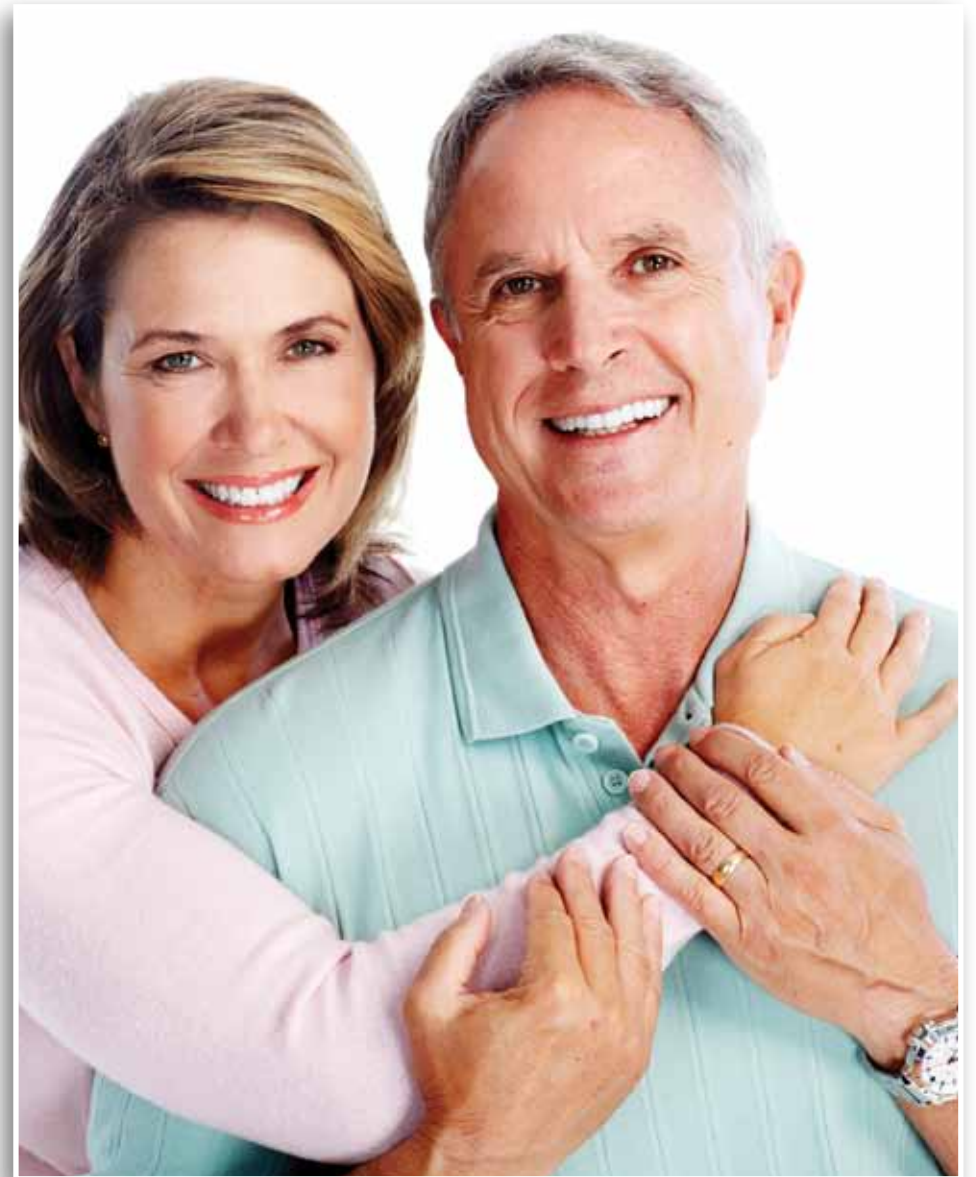
Our patients are received for in-treatment 1 day prior to the surgery and discharged within 7 to 10 days. The patients who are kept in CVS intensive care unit for 24 to 48 hours after the surgery are later followed in CVS service.

For patients within the suitable age range, small incisions (4-5 cm) and minimal invasive methods are applied during cardiac valve and hole operations.

- Closure of the holes in the heart (by both catheter method and open heart surgery)
- Aortic stenosis, vascular stenosis and post operations for these
- Operations to repair or replace cardiac valve
- Conduit (tubes with valves) replacements
- Extraction of heart tumours
- Insertion of pacemakers surgically
- All Fontan type operations (single ventricular type diseases)
- All urgent new-born operations
- High pulmonary blood pressure, application of artificial circulation systems (ECMO)

Treatments of Urology Clinic:

- Kidney and urinary tract diseases
- Kidney and urinary tract stones
- Urological cancers
- Prostate diseases and treatment (green light laser, open-closed prostate procedures), plasma kinetic prostate surgery
- Urinary gland functional disorders and enuresis problems
- Nocturnal urinary incontinence in children
- Sexual function disorder in men
- Infertility
- Closed-Endoscopic surgeries
- Urinary incontinence procedures
- Cancer procedures
- Undescended testicle in children
- Congenital anomalies (kidney ureteropelvic obstruction)
- Urological diseases of woman



ORAL AND DENTAL HEALTH



Gaziosmanpasa Hospital provides service with specialist team who work with a disciplinary approach for 7/24.

These services are;

- Mouth, chin surgery (tooth resection, cyst resections, embedded tooth operations, emergency chin and mouth trauma interventions)
- Implant (Tooth implantation)
- Conservative tooth treatment (aesthetic filling)
- Endodontia (Channel treatment)
- Orthodontia (treatment of crooked teeth)
- Periodontology (Gingiva diseases and treatments)
- Pedodonty (treatment of children teeth)
- Fixed and mobile prosthesis (total or skeletal prosthesis; porcelain, zirconium covering)
- Aesthetic dentistry
- Bruxism treatment (Treatment of teeth clenching and teeth grinding)
- Treatment of temporomandibular joint diseases
- Teeth treatment in pregnancy
- Treatment of oral malodour and desert mouth
- Treatment of cankers (canker sores, herpes...)
- Laser treatment of gingival pigmentations
- Bleaching (teeth bleaching with laser)
- Diagnosis and Radiology (90% less radiation is received with oral camera, panoramic radiography, digital oral radiography)

NEUROLOGY

Neurology Unit gives service with polyclinic, emergency room, patient hospitalization and intensive care units for therapeutic and diagnostic purposes in all brain and nervous system diseases in Gaziosmanpasa Hospital. Headaches, dizziness, epilepsy, multiple sclerosis, mobility disorders, dementia, syncope and anterior horn diseases (ALS) are diagnosed and treated in neurology unit. Adult and paediatric EEG, sleep deprivation EEG, EMG sleep test, lumbar puncture are applied to support diagnosis and follow-up.



INTENSIVE CARE UNITS



Gaziosmanpasa Intensive Care Units under supervision of specialists for 24 hours have 80 beds including,

- 35 beds in intensive care unit,
- 10 beds in CVS,
- 8 beds in coronary intensive care unit,
- 27 beds in newborn intensive care unit.
- All beds have invasive monitorization, ventilator and headboard dialysis infrastructure.
- Also hemodiafiltration and plasmaferesis opportunities are present.
- There is a scale features in some beds.
- Follow-up and treatments of our patients are performed with a multidisciplinary approach.
- All patient beds are followed with the camera.
- Camera is used to give information to patient relatives if required.

OPERATING ROOMS

There are 10 operating rooms which was built with intelligent building technology in Gaziosmanpasa Hospital. Common areas of the operating room and arrangements in the operating rooms are built in accordance with national and international standards. Our hospital provides service to all patients from newborn to elder ages with one assistant professor and 8 anaesthetists and experienced operation nurses, anaesthesia technicians and assistant health personnel for 24 hours. Required preventions are taken by holding the patient safety in maximum, service complying with national and international quality standards is provided.

Our hospital continues to be leading in many departments such as "kidney transplantation, heart surgeries, micro surgery and plastic surgery" with current technical facilities and experienced surgery team. Besides, many endoscopic surgeries are performed such as "laparoscopic gall bladder, nissen fundoplication, appendectomy, inguinal hernia, hysteroscopy, hysterectomy, endoscopic thorascopic symphatectomy, arthroscopy, percutaneous nephrolithotripsy and nephrectomy".

There is a full equipped intensive care unit that all medical support may be provided if required after the operation.

Anaesthesia is applied during delivery room, in vitro fertilization, MRI, peripheral angiography and endoscopy applications. Besides, epidural catheter should be applied for painless delivery.





A 24 hour non-stop service is provided for the patients that have gone under any surgery, using advanced techniques with the conventional (open) and laparoscopic (minimal invasive) methods. As well as previously planned operations are conducted as a result of the polyclinic applications from the patients, required urgent surgical treatments are also given as a result of emergency applications.

Advanced stage cancer can also be treated at our clinic with combined interventions such as radio embolization, radiofrequency ablation conducted together with interventional radiology unit in liver tumours.

The areas we provide services are:

1. In Hepato-pancreato-biliary surgery unit;

- Liver
- Pancreas
- Cholecyst
- Biliary tract operations

2. In Gastrointestinal surgery unit;

- Esophagus and Reflux surgery
- Stomach
- Colon and small intestine
- Anorectal region diseases (haemorrhoid, fissure, fistule) surgeries

3. In Breast – endocrinal surgery unit;

- Breast
- Thyroid and cervical disectomy
- Adrenal operations

4. In Obesity and metabolic surgery department;

- Laparoscopic Sleeve gastrectomy opeations

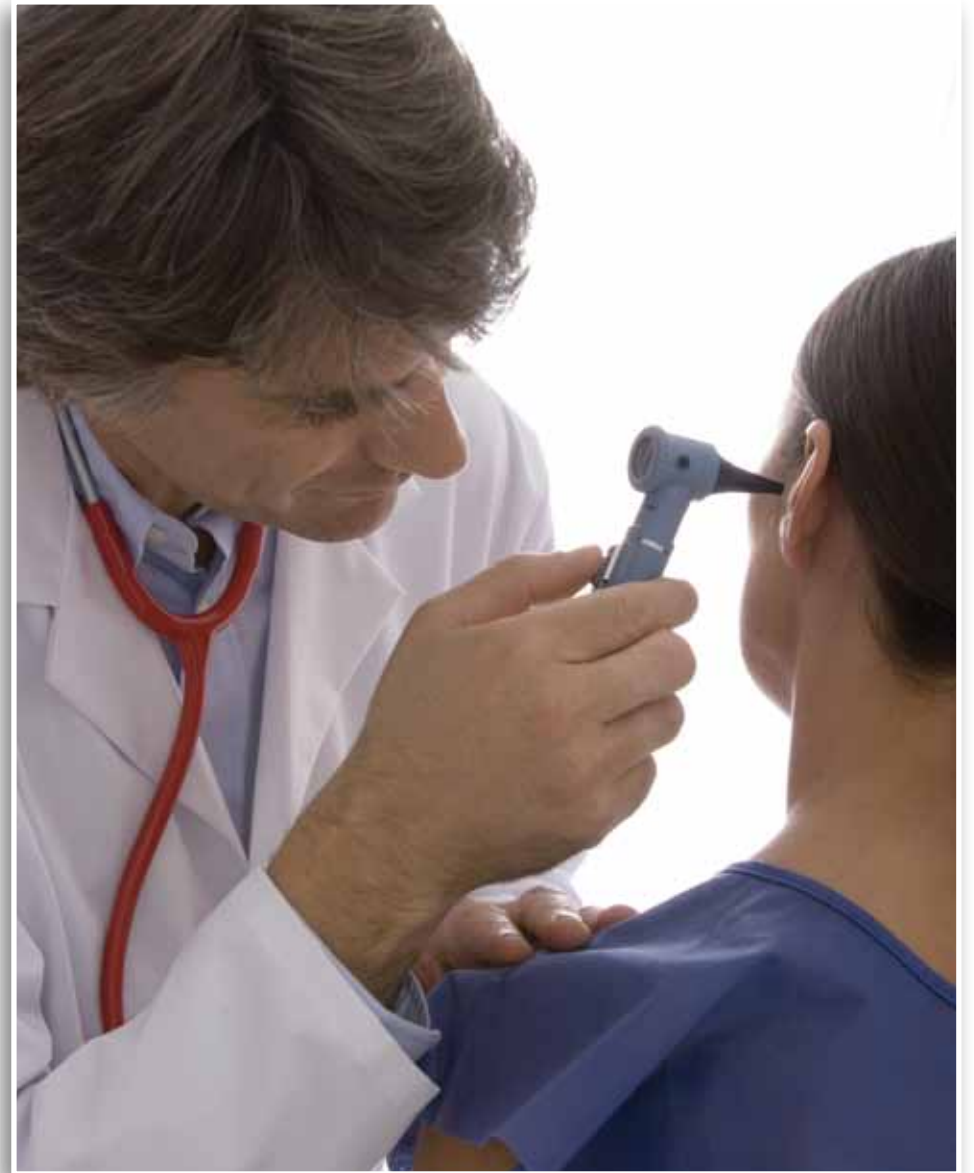
5. Hernioplasty / Hernia surgery

- Hernia repairs on groin and stomach walls are conducted with laparoscopic and open surgeries.

EAR, NOSE AND THROAT SURGERY

We perform our examinations by endoscopic method. Hearing tests (odiotypanogram, autoacoustic emission and BERA) and balance test (ENG) are performed in our hearing and balance center. Special operations are also done as well as standard operations (tonsil, adenoid, ventilation tube, deviation and concha operations) by our ENT team. These are;

- Traumatic surgery (broken jaw and facial bones)
- Skull base surgery (with relevance to tumours)
- Ear surgeries
- External ear atresia (external ear tract developmental disorders)
- Facial and neural surgery
- Hearing loss – lack of eardrum, eardrum collapse, ear calcification
- New solutions for dizziness and tinnitus
- Cancer surgery – treatment of tumours in head and neck
- Advanced endoscopic sine surgery, inveterate sinusitis, nose polypus and cyst – tumours
- Hoarseness treatment
- Snoring and aphonia treatment
- Cochlear implant



COCHLEAR IMPLANT (BIONONIC EAR)



The Cochlear implant is a small electronic device that can provide hearing even in full deafness. Normal hearing aids increase the sound coming from the surroundings and give it back to the ear. In the event of a high level of damage in the feathery cells in the inner ear, hearing is not possible does not matter how much the sound is increased. In other words, normal hearing aids are not enough for hearing loss in the advanced or extremely advanced stages. However, since the cochlear implant transforms the sound into an electrical energy and transmits it to the hearing nerve, it provides hearing even in deafness situations that occur after high level of feathery cell loss.

The Cochlear implant consists of two main pieces as internal and external pieces. The external piece consists of the receiver (microphone) and the processor and it is clasped on the earlap/ pinna and scalp. The external piece is detachable just like the hearing aids. However, the internal piece consists of two pieces (stimulator and electrode) which are inserted to the internal ear and subcutaneous layer through a surgical operation.

Who is a Candidate of the Cochlear Implant?

- All individuals with internal ear injuries that do not benefit from hearing aids and whose hearing nerve is intact are candidates for cochlear implants.
- Cochlear Implant Criteria;
- Age: Being older than the age of 1
- Children: loss of hearing at very advanced levels in both ears
- Adults: Having hearing thresholds over 70 dB and ability to distinguish speech being worse than 30% and not getting enough benefit from hearing aids
- No medical disability (including advanced heart, lung diseases, mental retardation, psychosis, etc.)
- Having adequate motivation and appropriate expectation
- Availability of sufficient training and rehabilitation opportunities after surgery

PLASTIC, RECONSTRUCTIVE AND AESTHETIC SURGERY

Plastic and Reconstructive and Aesthetic Surgery Unit is our surgical unit which repair congenital or acquired anomalies, shape and function disorders and tries to correct the body image. Service is provided to our patients by using new technology and actual methods.

- Rhinoplasty
- Face Implants
- Blepharoplasty
- Facelift
- Forehead lift
- Prominent Ear Correction
- Reduction Mammoplasty•Mastopexy
- Gynecomastia
- Breast Augmentation
- Abdominoplasty

HAIR TRANSPLANTATION

In our Hair Transplantation Unit, we service in 2 operation rooms belonging to our unit. We response to demands of our yearly 450 to 600 patients with the latest technology Follicular Unit Extraction (FUE).



HAND SURGERY AND MICROSURGERY



- Hand, fore arm and hand injuries, cuts;
- Hand, finger, wrist fractures;
- Hand numbness complaints (nerve compression)
- Finger tripping complaints
- Mass in hand, wrist and arm
- Congenital hand shape disorders
- Rheumatismal hand and feet diseases
- Strokes due to function disorders of arm nerves, congenital and traumatic sense and mobility defects;
- Ligament problems of hand and wrist joint and related pains,
- Wrist arthroscopy;
- Vascular problems of the hand;
- Repair of tissue deficiencies in the upper extremity

ORTHOPEDICS AND TRAUMATOLOGY

Both closed and open bone fractures occurred are intervened either conservative or surgical as soon as possible in Orthopaedics and Traumatology Unit of our hospital.

Diagnosis and treatment of childhood and juvenile diseases such as scoliosis, kyphos, hip dislocation, hip joint atresia, perthes disease are also performed.

Surgical treatments of arthrosis in the knee, hip and shoulder joints, total knee and hip prosthesis, and revision operations that may require in cases who underwent this procedure are applied arthroscopic and open surgery. In parallel to current orthopaedic applications, partial (unicondular) knee prosthesis operations that require minimum hospitalization period and rehabilitation in our patients are performed.





CRANIAL SURGERIES

- Artificial and deep brain tumours (benign, malign)
- Brain abscess (aspiration with burr hole and craniotomy)
- Aneurysm surgery
- Lateral in-ventricle tumour surgery
- Posterior fossa tumour surgery
- Hydrocephalus operations
- AVM and endovascular approaches on aneurysm (with neuroradiology)
- Intra-cerebral, subdural, epidural hematomas
- Cranial displaced fracture repairs

SPINAL SURGERY

- Lumbar disk herniation (micro-discectomy and microsurgery)
- Cervical disk herniation (intervertebral graft, lattice and disk prosthesis application)
- Cervical and lumbar narrow channel operations
- Spondylolisthesis and stabilization operations
- Spinal trauma and stabilization operations
- Spine tumours
- Vertebroplasty and kyphoplasty applications for collapsed backbone

PEDIATRIC NEUROSURGERY

- Spinal meningocele excision
- Spinal meningomyelocele excision
- Cranial encephalocoele operations
- Spinal dysraphism, closed surgeries (diastematomyelia, tethered cord, dermal tractus, dermoid- epidermoid tumours)
- Reservoir and shunt applications for babies with premature hydrocephalus
- Craniosynostoses (skull shape disorders due to an early closure of cranial sutures) operations (trigonocephaly, brachycephalia, scaphocephalic, microcephaly)

NEUROSTIMULATOR

Neurostimulator is a surgical application that can be used primarily in the treatment of movement disorders such as Parkinson's Disease, shivering and dystonia resistant to drug treatments, psychiatric diseases resistant to drug treatments such as major depression, compulsive disorders and some epileptic diseases. It is known that these mentioned diseases are caused by over stimulation and lack of stimulation on some particular parts of the brain. It is thought that neurostimulator technique is effective by regulating this inaccurate stimulation. It enables decreasing the dose of drugs used by a majority of the patients and abandoning drugs completely in a small portion of patients.

Neurostimulator is a very effective treatment for a carefully and accurately selected group. In the other words, some criteria must be taken into consideration while selecting the patients for neurostimulator application. Especially the first 5 years of Parkinson's disease during when the disease responds to medication well. Patients over 70, individuals with medium-advanced stage dementia or those who have serious internal diseases are not deemed as suitable cases either. The patients apart from these or those considered to be suitable are prepared for the procedures having passed through the assessment of a council of psychiatric doctors.



SPINE AND SPINAL CORD SURGERY



At our center, all types of surgical treatments for spine and spinal cord diseases for new-borns, babies, children and adolescents are conducted by our experienced personnel specialized in their fields.

The patients are evaluated before and after the surgeries by our physical treatment department.

The diseases which are surgically treated at our center are listed as follows:

- Scoliosis
- Endoscopic lumbar disc herniation surgery
- Kyphosis
- Cervical disc herniation
- Lumbar disc herniation
- Thoracic disc herniation
- Spinal stenosis (on cervical, thoracic, lumbar regions) (narrowing in spinal canal)
- Cranio-cervical junction and upper cervical spinal anomalies
- Spine and spinal cord tumours (primer, metastasis)
- Lumbar spondylolisthesis
- Cervical spinal fractures (neck fractures)
- Thoracic spinal fractures
- Lumbar spinal fractures (waist fractures)
- Sacral fractures
- Kyphoplasty (injection of bone cement into the spine)
- Epiduroscopy (endoscopic decompression of blockages in herniated discs)
- Surgery of spinal infections (tuberculosis, Brucella, etc.)
- Treatment of spasticity (backlophen pump implantation)
- Spinal cord stimulation (treatment of failed back surgeries)
- Spina bifida aperta (meningocele, meningomyelocele) (a condition that affects the spine, usually apparent at birth)
- Tethered cord syndrome (stretched spinal cord syndrome)
- Diastematomyelia (split spinal cord disorder)
- Syringomyelia (Cyst formation inside spinal cord)
- Chiari malformations (downward displacement of the cerebellar)
- Dermal sinus (extension of the opening on the skin to spinal cord)

OBSTETRICS AND GYNAECOLOGY

- Normal pregnancy follow-up
- Monitorization of high risk pregnancies
- 4D USG
- Amniosynthesis
- Vaginal delivery- caesarean section
- Painless delivery through epidural anaesthesia
- Diagnosis and treatment of general gynaecologic diseases
- Menopause
- Family planning
- Gynaecologic surgery
- Laparoscopic surgery
- Cervical procedures (Smear, Colonoscopy, Electro-cryotherapy)
- Reproduction Endocrinology Infertility and In-Vitro Fertilization Center

Services provided by the In Vitro Fertilization Center:

- Traditional in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI)
- Blastocyst transfer
- Assisted hatching
- Pre-implantation genetic diagnostics
- Cryopreservation of sperm and embryos
- Micro TESE/TESA
- Sperm injection
- Laparoscopic and hysteroscopic surgery





All pediatric surgery operations are performed in our unit by our specialist physicians.

Surgical problems of newborn babies and children related with constipation are solved. Surgical diseases related with intraabdominal organs and anomalies associated with uro-genital system, hypospadias penile torsion, penoscrotal fusions, hydronephrosis (UPJ obstructions, vesicourethral reflux, undescended testicle, hernia) urethral obstructions are treated complying with scientific development.

There is a full equipped newborn care unit and operating room for surgical diseases of newborns in our hospital. Newborn diaphragm hernia, oesophagus, duodenum, jejunum and ileum atresia, ano-rectal malformations are corrected successfully.

OPHTHALMOLOGY

Services provided in Ophthalmology Unit;

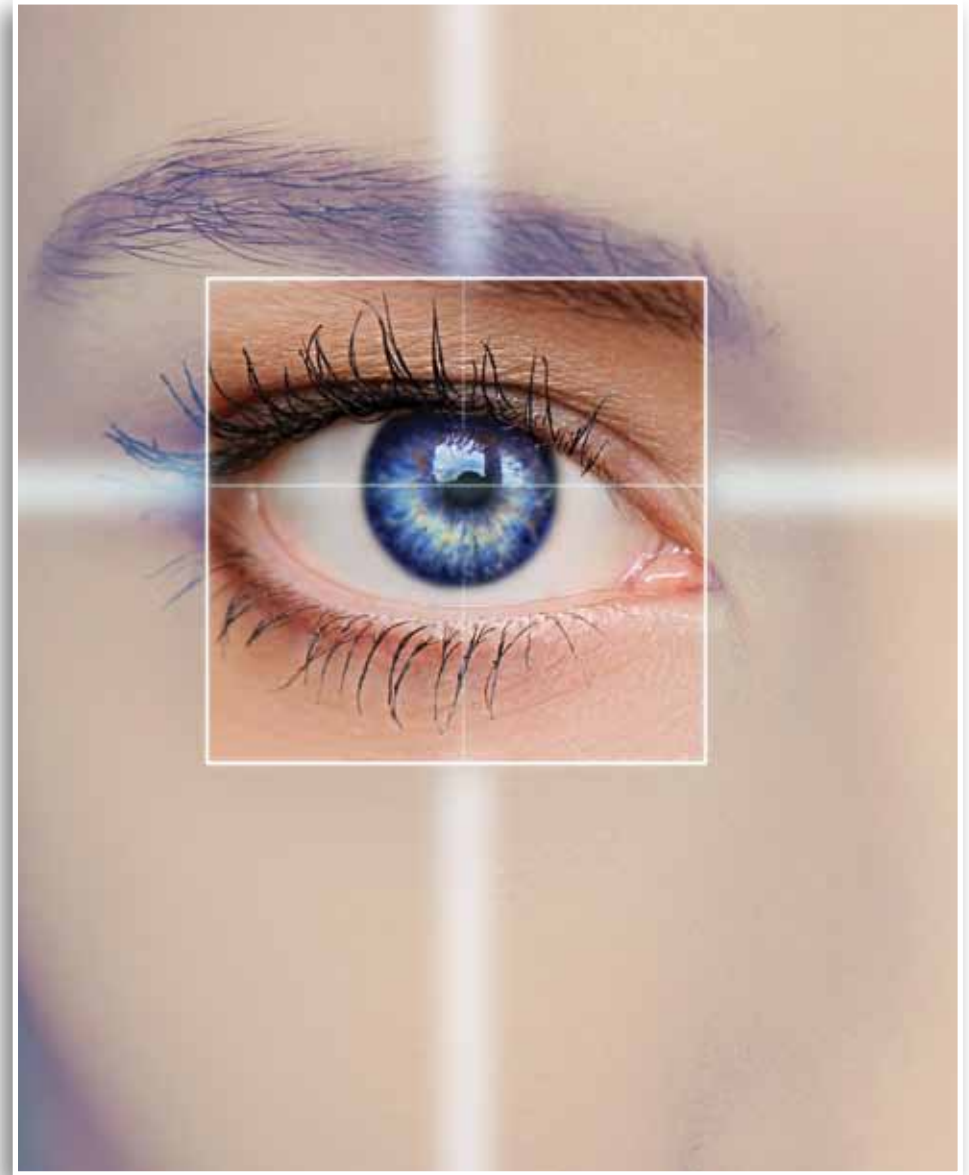
- Cataract treated with Faco,
- Diagnosis and treatment of glcoma
- Diagnosis and treatment of keratoconus
- Eye contour aesthetic,
- Lacrimal and eye lid diseases and treatment
- Amblyopia diagnosis and treatment
- Eye disorder and strabismus diagnosis and treatment
- Excimer Laser

In our Diagnostics Unit;

- Fundus fluoresceine angiography,
- Argon laser,
- Yag laser,
- Pachymetry
- Visual field,
- Synoptophor,
- OCT (Optic Cohorence Tomography)
- Cornea topography

In our Surgery Unit;

- Facoemulcification + IOL
- Multifocal iol implantation
- Toric lens implantation
- Corneal x-link application,
- Corneal Cross ring application,
- LASIK, LASEK, PRK with excimer laser
- Cornea transplantation,
- 23-35 gauge sutureless vitrectomy
- Trabeculectomy
- Decollement surgery,
- Strabismus surgeries,
- Oculoplastic surgery applications,
- Dacriocystorinostomy with multidiode laser
- Intravitreal drug applications





- Diagnosis and treatment of dermatological and veneral diseases
- Cosmetic dermatology applications
- Allergy tests
- Dermatoscopy
- Electrocatherization
- Cryotherapy
- Intralesionary injection
- Byopsy
- Fototherapy (DUVB and uva)
- Ionthopheresis (Sweating treatment)
- Onyxis, callus and verruca treatments in Foot Health Unit
- Chemical peeling
- Sweating and wrinkle treatment with botox
- Wrinkle treatment with filling.
- Treatment of trace and wrinkle with dermoroler
- Mesotherapy
- PRP (Platelet Rich Plasma)
- Laser depilation, rejuvenation, verruca treatment, acne treatment, varicosis treatment, treatment of fungus in the nail and foot.

SPECIAL DIAGNOSIS AND TREATMENT CENTERS

- Pain Polyclinic
- Dental Unit
- Kidney Stone Treatment Unit
- Angiography Unit
- Aviation Medicine Center
- Headache Polyclinic
- Cosmetic Dermatology
- In Vitro Fertilization Center
- Check-Up Center
- Mammo-Clinic
- Hair Transplant

BONE MARROW TRANSPLANTATION CENTER

- Pediatrics Bone Marrow Transplantation Center
- Bone Marrow Transplantation Center For Adults

ONCOLOGY CENTER

- Medical Oncology (Chemotherapy)
- Radiation Oncology (Radiotherapy)
- PET/CT (Nuclear Medicine)

MULTI-ORGAN TRANSPLANT CENTER

- Heart Transplant And Mechanical Heart Support Systems Center
- Liver Transplantation Center
- Kidney-Pancreas Transplantation Center
- Hepatopancreatobiliary (HPB) Surgery Center

DIAGNOSTIC CENTER FOR GENETIC DISEASES

SURGICAL DEPARTMENTS

- Anaesthesiology And Reanimation
- Mammo-Surgery
- Otorhinolaryngology Surgery
- Brain, Spine And Nerve Surgery
- Eye Diseases
- Orthopaedics And Traumatology
- Paediatrics Surgery
- Gynaecological Diseases And Labour
- Aesthetic, Plastic And Reconstructive Surgery
- Hand Surgery And Micro-Surgery
- Cardiovascular Surgery Center
- Urology
- General Surgery
- Neurostimulator
- Spine And Spinal Cord Surgery
- Thoracic Surgery
- Obesity And Diabetic Surgery Center
- Oncologic Surgery Center

INTERNAL DEPARTMENTS

- Nutrition and Dietetics
- Child Haematology
- Cardiology
- Paediatrics
- Child Nephrology
- Neurology
- Internal Medicine
- Infection diseases
- Nephrology
- Dermatology

- Physical Treatment and Rehabilitation
- Gastroenterology
- Haemodialysis Center
- Chest Diseases
- Psychiatry
- Child Cardiology

INTENSIVE CARE UNITS

- General Intensive Care (Reanimation)
- New-born Intensive Care
- Coronary Intensive Care
- Cardiovascular Intensive Care

RADIOLOGY

- 1.5 Tesla MR (76*18)
- 64 Slice Computerized Tomography
- Digital Angiography (DSA)
- Fluoroscopy
- Digital Mammography
- X-ray
- Ultrasonography and Doppler Ultrasonography

NUCLEAR MEDICINE

- Bone Density Measurement
- Gamma Camera (Scintigraphy)
- PET/CT

CLINIC LABORATORIES

- Biochemistry
- Endocrinology
- Haematology
- Microbiology
- Serology
- Pathology
- Sitology

CARDIOLOGY LABORATORY

- EKG (Electrocardiography)
- EKO (Echocardiography)
- EKG with Efforts (Treadmill)
- EKG – Blood Pressure Holter

ENDOSCOPY

- ERCP
- Gastroscopy
- Colonoscopy
- Rectoscopy
- Gastroduodenoscopy
- PH Meter
- Rectal And Esophagus
- Manometer

OTORHINOLARYNGOLOGY LABORATORY

- Audiometry
- Tympanometry
- Auto acoustic emission
- Balance Test
- Bera

NEUROLOGY LABORATORY

- EEG
- EMG

RESPIRATION LABORATORY

- Respiratory Function Test
- Bronchoscopy
- Allergy Tests



GAZİOSMANPAŞA HOSPITAL



**YENİ YÜZYIL UNIVERSITY
GAZİOSMANPASA HOSPITAL**



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