Cardiovascular Medicine

Specialized medical services

In our department, more than 60 cardiologists certified by the Japanese Circulation Society work together to diagnose, treat, and prevent cardiovascular diseases in general. In addition, we provide 24-hour emergency medical care in cooperation with the Trauma and Acute Critical Care Center and accept emergency cases such as acute myocardial infarction and heart failure. In treating heart failure, we are an accredited institution for heart transplantation, and we are working with a sense of mission as the "last bastion" of cardiology in Japan for all patients with heart failure from mild to severe. In particular, we have experienced many cases of cardiomyopathy, and we are making efforts in differential diagnosis, prognosis prediction, and treatment. For ischemic heart disease, in addition to the conventional multi-slice computed tomography and myocardial scintigraphy, FFRCT, which measures the degree of blood flow reduction in coronary stenotic lesions, was introduced in December 2020. Coronary angiography and percutaneous coronary intervention are performed after diagnosing coronary artery disease with less invasive tests. We actively treat patients with intractable arrhythmia by catheter ablation, pacemaker implantation, and defibrillator implantation. In addition, we also perform various catheter interventions for structural heart diseases. Please feel free to contact us regarding treating patients with cardiovascular diseases, including acute conditions.

Features

We are a certified institution for heart transplantation and ventricular assist device implantation. We are particularly active in the treatment of patients with severe heart failure, making full use of a wide range of diagnostic imaging tests to make a differential diagnosis of cardiomyopathy and then providing a wide range of therapies from drug therapy to biventricular pacing therapy and, in collaboration with cardiovascular surgeons, ventricular assist device implantation and cardiac transplantation. We also conduct many clinical trials and clinical studies at our facilities and partner with other nationwide and overseas facilities. In the heart failure care, we treat various cardiomyopathies such as dilated cardiomyopathy, hypertrophic cardiomyopathy, sarcoidosis, and amyloidosis and focus on identifying the underlying disease through detailed examinations, including myocardial biopsy. We perform a wide range of therapies in arrhythmia treatment, including pacemaker implantations, ablation therapy, and lead removal using the excimer laser for pacemaker infection. We also manage implantable cardiac devices through remote monitoring. We are working on diagnosis and treatment for ischemic heart disease utilizing diagnostic imaging such as 320-row of multi-slice CT, FFRCT, intravascular ultrasound, OCT, and MRI. We also actively incorporate metabolic approaches to prevent the onset and recurrence of coronary artery disease, aiming to provide fundamental therapy against the accumulation of arteriosclerotic risk factors represented by metabolic syndrome. In collaboration with the Department of Cardiovascular Surgery, we have performed more than 1000 cases of transcatheter aortic valve implantation (TAVI) for aortic

stenosis. We also perform various catheter interventions for structural heart diseases, including percutaneous transluminal septal myocardial ablation (PTSMA) for obstructive hypertrophic cardiomyopathy and catheter therapy for mitral valve regurgitation (MitraClip) started in 2018, and transcatheter closure of atrial septal defect (ASD) started in 2019. In addition, we started transcatheter patent foramen ovale (PFO) closure in 2021. In collaboration with the Department of Neurology and Cerebrovascular Disease, the Brain Heart Team treats patients with PFO and paradoxical embolism.

Considerations in referring your patients to Cardiovascular Medicine

We widely accept first-visit patients. To improve our services, such as shortening waiting time, we set up an outpatient clinic for first-visit patients every day. We are also ready to accept direct referrals to each specialized outpatient clinic, such as ischemia heart disease, SHD, pulmonary hypertension, lipids, congenital heart disease, etc. For details, please refer to the latest schedule of outpatient physicians.

Nephrology

Specialized medical services

In the nephrology department, evidence-based medical care is provided for all diseases related to the kidney. It is specialized to examine abnormalities in urine such as hematuria and proteinuria found in a regular health check, chronic kidney diseases (e.g. IgA nephropathy, lupus nephritis, nephrotic syndrome, diabetic kidney disease), hereditary kidney diseases such as polycystic kidney disease, acute kidney injury, edema and abnormalities in water, minerals and electrolytes such as sodium, potassium, and calcium. For nephritis and nephrotic syndrome, renal biopsy (45 cases in FY2020) is performed for histopathological diagnosis, and treatment regimen is decided according to the pathophysiology. In the case of advanced chronic kidney diseases, there is a renal education program in both inpatient and outpatient settings, in collaboration with doctors, nurses, pharmacists, dietitians, and other professionals, with the aim of "delaying renal replacement therapy as far as possible". For the treatment of renal insufficiency, outpatient clinic exclusively for 'the selection of renal replacement therapy' is available, in which we support the introduction of all types of renal replacement therapy, including hemodialysis, peritoneal dialysis, and renal transplantation in cooperation with urology, considering patient's physical, mental and social conditions. After the introduction of renal replacement therapy, patients will be treated intermittently with the management of complications.

Features

For IgA nephropathy, patients will be treated with tonsillectomy (to be performed at the ENT department of another hospital) plus steroid administration toward complete remission. For

rapidly progressive glomerulonephritis associated with ANCA-associated vasculitis, intensive treatments are sometimes required using steroid pulse therapy, high-dose immunosuppressive agents, and plasma exchange. Specific treatments are designated for inheritable kidney diseases such as tolvaptan for autosomal dominant polycystic kidney disease, rituximab for refractory nephrotic syndrome, and enzyme replacement therapy for Fabry disease. In the case of chronic kidney diseases, we are engaged in multidisciplinary team to delay or prevent the progression to end-stage renal failure. We are also actively engaged in the treatment and management of renal anemia and abnormalities in mineral and bone metabolism, as well as the close examination of cardiovascular disease risks. The blood purification department of the hospital provides a wide range of blood purification-related treatments, including hemodialysis, plasma exchange and immunoabsorption.

Consultation Guides for Patients to Nephrology Department

Please make an appointment through the Health and Welfare Network Department from the primary medical institution. If you find obvious proteinuria or hematuria in urine tests, or abnormalities in blood tests that show impaired kidney function (elevated serum creatinine, decreased eGFR, etc.), some kidney damages are indicated. It is a characteristic of chronic kidney disease (CKD) that once it gets worse, it is often irreversible. CKD is also known to increase the risk of cardiovascular diseases as well as end-stage renal failure, so please do not hesitate to inquire.

Gastroenterology and Hepatology

Specialized medical service

We treat patients with a wide variety of diseases including hepato-biliary-pancreatic diseases such as chronic hepatitis, cirrhosis, hepatic cancer, and pancreatic cancer, as well as gastrointestinal diseases such as gastrointestinal cancer and inflammatory bowel disease. We apply the latest treatments to patients with chronic hepatitis C or B with new antivirals, even playing a central role in the world. Patients with hepatic cancer are treated by radiofrequency ablation, transcatheter arterial embolization, and molecular target drugs on an interdisciplinary basis.

We strive to detect esophageal cancer, gastric cancer, and colorectal cancer at the early stage and perform proactively minimally-invasive treatment by endoscopic resection. We conduct clinical studies on the effects of chemotherapy with molecular-target drugs on patients with colorectal cancer and gastrointestinal stromal tumor and on the effects of chemoradiotherapy on patients with esophageal cancer and pancreatic cancer.

We are committed to providing holistic medical care services with respect for patients' opinions, based on high-quality medical techniques.

Features

We conduct clinical studies: the effects of new antivirals on chronic hepatitis C or B; the effects of molecular target drugs on gastrointestinal stromal tumor and colorectal cancer; the effects of chemoradiotherapy on advanced pancreatic cancer; the effects of radical chemoradiotherapy on esophageal cancer; the effects of molecular target drugs on inflammatory bowel diseases; and the effects of immunosuppressive therapy on ulcerative colitis. Patients with fulminant hepatitis are treated in cooperation with the Trauma and Acute Critical Care Center and hepatic transplantation is also actively performed collaboratively with Gastroenterological Surgery. Endoscopic submucosal dissection is proactively applied to patients with early-stage esophageal cancer, gastric cancer, and colorectal cancer.

Metabolic Medicine

Specialized medical services

In the Section of Metabolic Medicine, there are about 60 physicians, including specialists in diabetes mellitus, dyslipidemia, hypertension, obesity, metabolic syndrome, atherosclerosis, thyroid diseases, pituitary and adrenal diseases. We take care of patients with such metabolic and/or endocrine disorders. Patients are admitted to this hospital when necessary (e.g. glycemic control, education for diabetes mellitus, evaluation and treatment of diabetic complications, treatment of hypertension and dyslipidemia, evaluation of atherosclerosis and cardiovascular diseases, evaluation and treatment of various pituitary and adrenal diseases).

Features

We take care of patients with a variety of metabolic and/or endocrine diseases such as diabetes mellitus, dyslipidemia, hypertension, obesity, metabolic syndrome, atherosclerosis, thyroid diseases, pituitary and adrenal diseases. We give nutritional education to patients with diabetes mellitus and evaluate diabetic complications, including macro- and micro-angiopathies. When necessary, diabetic patients receive guidance on foot care, self-injection of insulin and self-monitoring of blood glucose. Furthermore, we perform various load tests in order to evaluate pituitary and/or adrenal function.

Respiratory Medicine

Specialized medical services

We provide medical treatment for respiratory diseases in general. These are a broad range of diseases which include (1) malignant tumors of the respiratory system (lung cancer, malignant pleural mesothelioma, thymoma, thymic carcinoma, etc.), (2) interstitial pneumonia (idiopathic, drug-induced, collagen disease, etc.), (3) obstructive pulmonary disease (asthma, COPD, etc.), (4) respiratory infections (acute, chronic), (5) airway diseases (bronchiectasis, obstructive bronchiolitis, etc.), (6) diffuse rare lung diseases (sarcoidosis, alveolar proteinosis, lymphangiomyomatosis, etc.), (7) pulmonary vascular disease (pulmonary embolism, Osler disease, pulmonary hypertension, etc.). According to surveys by international organizations,

lung cancer, COPD and respiratory infections are expected to be serious health problems in society decades from now. Meanwhile, the practice of respiratory medicine has recently been transformed, such as molecular targeting agents and immunotherapy for lung cancer, and new drug development for interstitial pneumonia and rare lung diseases. In the diagnosis and treatment of respiratory diseases, which will be of increasing importance in the future, we hope to rapidly incorporate evidence from Japan and abroad to provide the latest and most promising treatments, at the same time practicing medicine carefully with consideration of safety. Also, in our role as a regional university hospital, we would like to receive patients who are difficult to diagnose or difficult to treat for diagnosis and treatment.

Features

At the respiratory center (established in April 2012), a unified treatment policy as the Osaka University hospital respiratory group was decided together with General Thoracic Surgery, Diagnostic and Interventional Radiology, Radiotherapy, nurses and physical therapists, and we strive to conscientiously provide treatment that is faster, higher quality and safer. However, among respiratory diseases, there are still those of which the cause is unknown and therapy has not yet been established. We are also actively involved in clinical research and clinical trials, and we would like to work to create new evidence. In recent years, we have established a network for studying interstitial pneumonia with major respiratory care facilities in Osaka Prefecture. In addition, since our hospital was designated a Cancer Genome Core Hospital, we have been actively practicing genome medicine for malignant tumor cases.

Considerations in referring your patients to Respiratory Medicine

The Respiratory Center has established a first visit outpatient time (morning examination) every day so that we can see patients who have been referred to us with a shorter waiting time. The medical institution that is the source of the referral should inform the Patient Support Center of this hospital of the referral information and make a reservation. If there are any abnormal chest image findings, please have the patient bring the past images or the findings together with the letter of referral. However, if a case has been diagnosed and treatment has been stabilized, the patient may be asked to continue treatment at the referral source or a nearby clinic.

Clinical Immunology

Specialized medical services

In the Department of Clinical Immunology, we treat diseases caused by the dysregulation of the immune system, which protects our body from pathogens. Such diseases include autoimmune diseases involving immune attacks on healthy organs; chronic inflammatory diseases, in which inflammation persists by the continuous activation of the immune system; allergic diseases, which are based on immune reactions; and immunodeficiencies, in which the immune function

is insufficient. Although autoimmune diseases, chronic inflammatory diseases, and allergies are treated in the Department of Rheumatology, Collagen Diseases, or Allergy at city hospital, we treat such diseases in the Department of Clinical Immunology, because such diseases often result from the dysregulation of the immune system.

We treat diseases characterized by polyarthritis such as rheumatoid arthritis, polymyalgia rheumatica, and spondyloarthritis; the so-called collagen diseases such as systemic lupus erythematosus, polymyositis/dermatomyositis, systemic scleroderma, mixed connective tissue diseases, and Sjogren's syndrome; various vasculitis syndromes that include the inflammation of large-to-small blood vessels; chronic inflammatory diseases such as Behcet's disease and adult-onset Still's disease; allergic diseases such as bronchial asthma, eosinophilia, and IgG4-related diseases; and various types of immunodeficiencies. Currently, our department has approximately 2,100 outpatients.

Features

The latest evidence-based medical care services are provided after receiving informed consent from the patient. Moreover, medical care services that are most appropriate for individual patients are provided. Symptoms and organ-damages in patients with the dysregulation of the immune system are likely to extend to the whole body, and they are treated in close cooperation with Internal Medicine as well as the Surgery, Sensory Organ/Dermatology/Motor System, Neuropsychiatry, Obstetrics, and Gynecology Departments.

Considerations in referring your patients to Department of Clinical Immunology

We treat patients from not only the Osaka area but also the Kinki district. We are particularly committed to treating patients with active rheumatoid arthritis who require biologics and patients with various collagen diseases who are in the active stage. We would appreciate it if you refer patients before organ damage progresses. When referring patients to our department, please attach clinical information and make a reservation through our Department of Health Care and Welfare Network. There is a limit to the number of patients we treat per day who are visiting us for the first time. If a patient's symptom is severe or organ damage progresses rapidly, we will treat patients as early as possible. The disease condition often becomes stable for a long time after appropriate treatment, in such case we may refer patients to a nearby hospital.

Hematology and Oncology

Specialized medical services

We treat all patients with hematological disorders, including hematopoietic malignant diseases such as leukemia, malignant lymphoma, myelodysplastic syndromes, and multiple myeloma, as well as anemia and hemostatic disorders. We are committed to providing the medical care services most appropriate for individual patients collaboratively with a team of physicians of

various clinical sections, with respect for patient's rights, centering on the usual chemotherapy regimen, molecular target medication, radioimmunotherapy, and hematopoietic stem cell transplantation. We always strive to select the optimal treatment for individual cases based on the latest evidence. New examination techniques are used in daily consultation; moreover, clinical studies on new drugs are proactively conducted to provide up-to-date medical care services.

At present, about 200 patients, most of whom suffer from hematopoietic malignant diseases, are admitted annually. Among these inpatients, those with refractory disease and/or poor outcome undergo related bone marrow transplantation or unrelated hematopoietic stem cell transplantation with the assistance of the Japan Marrow Donor Program (JMDP). We also have abundant experience in the diagnosis and treatment of idiopathic thrombocytopenic purpura among hemorrhagic diseases, and accept a lot of patients referred from other medical facilities.

Features

We actively treat patients with hematopoietic malignant diseases, mainly by chemotherapy and stem cell transplantation to achieve radical cure. Moreover, we make full use of advanced medical techniques, e.g., the surface marker test and gene diagnosis, and determine the treatment policy while monitoring the minimal residual disease using real-time PCR. Thrombasthenia and paroxysmal nocturnal hemoglobinuria are diagnosed by using a flow cytometer.

Allogenic bone marrow transplantation (or peripheral stem cell transplantation) is performed on about 25 patients annually. The post-bone marrow transplantation long-term survival of standard-risk patients is about 70%, which shows a favorable outcome of treatment. Non-myeloablative transplantation (mini-transplantation), with myelosuppressive action reduced by pretreatment, is applied to elder patients and patients with complications. We also actively perform transplantation from HLA-unmatched related donors and umbilical cord blood transplantation.

In clinical studies, the safety and effectiveness of new therapeutic drugs are intensively examined.

Geriatrics and Hypertension

Specialized medical services

We specialize in all geriatric diseases and various types of hypertension. It is recommended that you visit our clinical section if you have symptoms such as wooziness, forgetfulness, or unexplained fever, which cannot be treated by individual organ clinical sections or if you feel in vaguely poor condition and you do not know the appropriate clinical section. Our clinical section not only treats diseases, but also supports the improvement of patient's QOL. Counseling and short-term in-hospital examinations are performed for patients who require nursing care and are confined to bed.

As special clinical groups for outpatients, "Outpatient clinical group specializing in resistant

hypertension" (Wed., 2:30 pm-, Mon. to Thu., any time) and "Outpatient clinical group specializing in forgetfulness" (Mon., afternoon every two weeks, Thu. and Fri., afternoon) accept outpatients. Moreover, two admission services, "two-days and one-night clinical path admission for patients with forgetfulness" and "one-week hypertension educational admission", have been started. It is said that "A man is as old as his arteries". Accordingly, we provide medical services to patients with hypertension, which is the main contributor to deteriorated arteries, according to the latest guideline. We are committed to treatment of patients with resistant hypertension who find it difficult to lower their blood pressure levels. We also specialize in secondary hypertension (various endocrine hypertension and renal hypertension), one of the resistant hypertension diseases.

Patients with advanced arteriosclerosis who have pain during walking may receive the latest treatment.

Features

The elderly are likely to develop deteriorated physiological functions and diminished ability to perform ADLs with advancing age. For this reason, it is very important that these patients are treated from both the viewpoints of diseases and physical/mental/social problems. We provide not only medical care services for radical cure, but also "total care support" services to outpatients and post-discharge patients, including full use of nursing-care insurance and social resources by totally assessing patients using comprehensive geriatric assessment (CGA). In cooperation with surgical sections, we support risk assessment and management of surgical procedures on elderly patients of 75 years and upward. "Minimally-invasive (painless) examinations" are essential to treatment of elderly patients. It is recommended that "minimally-invasive examinations" be performed on the whole body of elderly patients using two ultrasonic diagnostic imaging equipment and PWV. Our clinical section has been involved in the preparation of Japanese Society of Hypertension Guidelines for the Management of Hypertension, playing a leading role in treatment of "elderly patients with hypertension". We have accumulated achievements in diagnosis and treatment of secondary hypertension associated with renal diseases, renovascular stenosis, and adrenal tumors, as well as in treatment of resistant hypertension.

Considerations in referring your patients to Geriatrics and Hypertension

We provide medical care services to elderly patients with general diseases, those with geriatric diseases including cognitive symptoms, and those with more than one complication who are difficult to have consultation in any of the organ clinical sections. Counseling services are also provided to the attendants of patients who require nursing care and are confined to bed to help them to fill in the application form for Nursing Care Insurance according to CGA. We make differential diagnosis of patients suspected of having resistant hypertension or secondary hypertension, and based on the result, determine a treatment policy appropriate for them; furthermore, we assess any complications in patients with general essential hypertension to present a treatment policy according to the guidelines for reference. We strongly recommend

that you use "Outpatient clinical group specializing in resistant hypertension", "Outpatient clinical group specializing in forgetfulness", "two-days and one-night clinical path admission for patients with forgetfulness", and "one-week hypertension educational admission".

Kampo Medicine

Specialized medical services

In our department, physicians who are specialists in both Western and Kampo medicine provide medical care. Because of the aging population and advances in treatment, the number of cancer survivors in Japan continues to increase. Although we provide a wide range of medical treatments for various diseases, since October 2019, we have been focusing on cancer. The ketogenic diet is considered to be effective for patients with cancer. We provide this treatment as well as Kampo medicine to treat cancer and the related treatment effects. When the ketogenic diet is followed in combination with other appropriate treatments, patients with cancer may feel better and live longer. We have recently performed the first clinical trial in Japan on the effectiveness of the ketogenic diet. We have also tentatively introduced weekly acupuncture and moxibustion treatments to relieve symptoms. Outpatient care is not available at our department outside of normal business hours or on weekends or holidays. Please consult your physician before planning a visit.

Features

We provide supportive care based on Kampo medicine as a holistic treatment system that complements other aggressive treatments for cancer, such as surgery, chemotherapy, or radiation therapy. We present diagnoses and prescribe Kampo formulations with the aim of improving the quality of life of patients with cancer. Kampo formulations, including around 140 Kampo extract products and 160 crude drug products, can be prescribed within Japan's National Health Insurance system. Kampo medicine has evolved as a system of medical practice and thinking over thousands of years. However, additional volunteers are needed to participate in clinical studies that could help create an evidence-based reconstruction of Kampo medicine to improve medical care for patients in the future. The results of clinical studies provide a better understanding of how to diagnose, treat, and prevent diseases and conditions. We appreciate your understanding and cooperation. Based on the traditional diagnostic methods of Kampo medicine, great care is taken in the examination and treatment at the initial consultation. Therefore, a substantial amount of time may be needed. Please make sure to arrive at least one hour before your scheduled appointment.

Considerations in referring your patients to Kampo Medicine

Consultations are by appointment only. Please consult in advance with the outpatient reception of the Patient Support Center. We meet with patients to understand their needs and make arrangements for necessary tests and appointments. Please note that patients are referred to the appropriate specialty section if necessary.

Department of General Medicine / General Medicine

Specialized medical services

We accept outpatients who visit the Osaka University Hospital for the first time with no referral letter and do not know the clinical section in which they should be examined, and outpatients with a referral letter to General Medicine. We refer the patients to the appropriate specialty section when determining that they need to be examined in the specialty section as the result of consultation. The outpatients who have no referral letter and those who have a referral letter but do not know the appropriate specialty section are handled at the reception counter. We do not in principle provide continuous medical services or hospitalization. The patients who are determined to need continuous treatment or hospitalization are referred to the appropriate specialty section in our hospital or in another hospital.

Features

About 100 new patients visit General Medicine every month, amounting to 400 to 500 patients per month including revisitors. Each day 20 to 30 new patients and revisitors visit General Medicine to consult about the appropriate specialty section. The person in charge at the reception counter listens to complaints of patients and refers them to the appropriate specialty sections if necessary. Other patients, for whom appropriate organ-specific clinical section cannot be determined, have an examination in General Medicine.

Considerations in referring your patients to General Medicine

If an appropriate specialty section cannot be determined for a patient even having a referral letter (for example, due to ambiguous destination of the referral letter), the referral letter is opened by the person in charge at the reception counter. Then, after listening to the patient and/or performing an examination in General Medicine, we determine the specialty section appropriate for the patient. To reduce the patient's waiting time, it is strongly recommended that you write clearly the destination of the referral letter (the doctor in the specialty section such as Gastroenterology and Hepatology or Cardiovascular Medicine).

In the case of symptoms which you are difficult to classify into the appropriate organ-specific clinical section, or those for which it is difficult to determine the appropriate specialty section, please refer the patients to General Medicine.

Infectious Diseases

Specialized medical services

You may not be familiar with the department of "Infectious Diseases". Department Infectious Disease medicine is a department that diagnoses patients with suspected infectious diseases and treats those diagnosed with infectious diseases. Infectious diseases can present with a

variety of symptoms such as fever, cough, sore throat, etc., and can sometimes be difficult to diagnose. Infections caused by rare pathogens or bacteria that are resistant to antimicrobial agents could be difficult to treat.

Our mission at the Department of Infectious Diseases is to treat patients with such infectious diseases that are difficult to diagnose and treat.

In addition to this, we plan to start an outpatient vaccination clinic for vaccination and infection prevention consultations. We will provide consultations on vaccinations for the prevention of infectious diseases required in various situations, such as the traveler's vaccine before going on an overseas trip or the pneumococcal vaccine before an upcoming surgery to remove the spleen.

Features

The Department of Infectious Diseases at Osaka University Hospital is staffed by specialists in infectious diseases. All physicians are experienced in general infectious diseases, and are capable of treating a wide variety of infectious diseases, including COVID-19, infectious diseases of immunocompromised patients, infectious diseases contracted overseas (imported infectious diseases), and sexually transmitted diseases.

Requests at the time of referral

The Department of Infectious Diseases hopes to contribute to the treatment of infectious diseases not only in Osaka Prefecture, but also in Kansai area and throughout Japan. If you wish to receive medical care at the Department of Infectious Diseases, please make an appointment through the Patient Comprehensive Support Center at the main hospital.

Surgery

Cardiovascular Surgery

Specialized medical services

In addition to general cardiovascular surgical diseases (coronary artery disease, valvular disease, aortic disease, congenital heart disease, etc.) that are indicated for surgical treatment, advanced medical treatments for heart failure include heart and lung transplantation, auxiliary artificial heart, and regenerative medicine. We are also actively engaged in transcatheter aortic therapies (TEVAR/EVAR), transcatheter aortic valve implantation (TAVI), MICS and robotic surgery as minimally invasive treatments. For general outpatients, several doctors are responsible for each specialty, but it is possible to deal with all cardiovascular surgical diseases.

Cardiovascular surgery is conducted every day from Monday to Friday, and more than 1,000 cardiovascular surgeries are performed every year. Open heart surgery has been conducted since the early days of cardiovascular surgery in Japan in the 1950s, and cases are regularly followed up as outpatients for decades after surgery.

Features

In regard to advanced heart failure, our institute is one of several centers where heart transplantation and ventricular assist device implantation are performed. We have actively introduced advanced surgical technologies such as implantable ventricular assist devices and regenerative therapy in cooperation with Cardiovascular Medicine.

Endovascular stenting is actively performed in patients with aortic aneurysm. For the first time in Japan, we have introduced transcatheter aortic valve replacement in patients who have severe aortic stenosis and cannot tolerate open heart surgery. We can provide compromised patients, who cannot tolerate open heart surgery, with such less invasive therapies. Patients in serious condition who are not indicated for surgical procedures may undergo these advanced medical techniques.

We systematically engage in close follow-up from newborn to adulthood in close cooperation with Pediatric Cardiovascular Medicine, Cardiovascular Medicine, and Obstetrics & Gynecology. We also perform minimally invasive open heart surgery to minimize the surgical wound cosmetically and provide surgical and medical therapies to patients with congenital heart disease.

Considerations in referring your patients to Cardiovascular Surgery

We actively accept all patients with acute myocardial infarction or aortic dissection, or those who require an emergency procedure, as well as those with serious cardiac failure who require IV inotropics, aortic balloon pumping, or a percutaneous extracorporeal circulation system. In critical cases, we will promptly send our staff to your hospital in order to check the patient's condition and confirm the patient's own wishes and the family's wishes before transferring the patient to our hospital. Please make arrangements for this when needed.

General Thoracic Surgery

Specialized medical services

We perform surgical procedures on all patients with respiratory diseases including lung cancer, emphysematous pulmonary diseases, myasthenia gravis, mediastinal tumor, pneumothorax, and empyema. Our clinical section is designated as a center for pulmonary transplantation from a brain-dead donor/living donor. We also perform chemotherapy and radiotherapy on patients with progressive lung cancer, in cooperation with Respiratory Medicine and Department of Radiology, followed by radical surgery. We perform thoracoscopic surgery including robotic-assisted thoracoscopic surgery or uni-portal thoracoscopic surgery on patients with early-stage lung cancer, striving to reduce the physical burden. The active use of thoracoscopic surgery on patients with mediastinal tumor and myasthenia gravis enables reduction of their surgical wounds and early discharge. We perform surgical procedures for radical cure while reducing the physical burden, being committed to promotion of advanced medical technology such as pulmonary transplantation.

Features

Over 400 of cases undergo surgical procedures under general anesthesia. Annual by-disease numbers of patients, who undergo surgery are about 140 for pulmonary cancer, 40 for metastatic pulmonary tumor, and 60 for mediastinal disease. About 70% of them undergo thoracoscopic surgery. We perform reductive surgery such as segmental resection, considering that the remaining pulmonary function may be conserved, and thoracoscopic surgery on patients with early-stage small lung cancer.

We have a lot of outcomes in treatment for patients with mediastinal tumor, Myasthenia gravis (MG) and have performed extended thymectomy on about 600 patients with myasthenia gravis with/without thymoma in 50 years. We conduct clinical research regarding the application of robot-assisted surgery for patients with thymoma, MG, and lung cancer to establish new surgical techniques. Our clinical section, one of seven facilities in which medical care services are provided for pulmonary transplantation, has performed lung transplantation from brain-dead donors on 66 patients, lung transplantation from living donors on 11 patients, and heart-lung transplantation from brain-dead donors on 3 patients since 2000. Three supervisory doctors certified by the Japan Surgical Society and over 10 medical specialists certified by the Japanese Association for Chest Surgery work together in our clinical section, which is designated as an educational center for surgeons specialized in general thoracic surgery and a center for certifying medical specialists in thoracic surgery.

Considerations in referring your patients to General Thoracic Surgery

Please feel free to refer your patients with pulmonary mass and mediastinal tumor to our clinical section. We actively provide second opinion services. Please ask your patients to bring diagnostic images such as X-ray images of the chest and CT images, as well as the results of blood tests such as tumor markers with them. Please contact our doctors' office in advance to have counseling for pulmonary transplantation (06-6879-3152, weekdays 10:00 am - 5:00 pm) and you can make an appointment. If you have any questions, feel free to contact us.

Gastroenterological Surgery

We treat patients with any of the gastroenterological diseases.

In particular, we accept patients with gastrointestinal malignant tumors and for organ transplantation.

Gastrointestinal cancers we treat include esophageal cancer, gastric cancer, colorectal cancer, and gastrointestinal stromal tumor, as well as liver cancer, carcinoma of the biliary tract, and pancreatic cancer in the hepato-biliary-pancreatic area.

Transplantation surgery we perform includes hepatic transplantation, kidney-pancreas transplantation, and pancreatic transplantation.

We also perform surgical procedures on patients with inflammatory bowel diseases and provide medical care services to patients with functional gastrointestinal diseases.

Features

Gastroenterological Surgery is developing new surgical therapies based on multimodality therapies for advanced cancers which have been considered to be intractable, such as preoperative chemotherapy for patients with esophageal or gastric cancer, pre-operative chemoradiotherapy for patients with pancreatic cancer, pre-operative molecular targeting treatment for patients with gastrointestinal mesenchymal tumor, and total pelvic exenteration for patients with recurrent rectal cancer. This clinical section is designated as a facility for organ transplantation from brain-dead donors, and provides clinical services and conducts research on hepatic/pancreatic transplantation.

Endoscopic surgery was introduced early on, and minimally invasive surgery is performed on patients with gastric cancer, colorectal cancer, esophageal cancer, liver cancer, and pancreatic cancer. Especially for gastric cancer and colorectal cancer, most operations are performed laparoscopically or with robotic (da Vinci) support, and the numbers of gastric cancer and rectal cancer operations with robotic (daVinci) support are both over 120 (as of March, 2020); one of the largest institutions in Japan. In addition, single port surgery, which is conducted only through the umbilical opening, is actively performed on patients with colorectal cancer.

Considerations in referring your patients to Gastroenterological Surgery

Gastroenterological Surgery accepts new patients on weekdays from Monday to Friday. Feel free to contact our attending surgeon if your patient requires an emergency procedure. We accept patients with fulminant hepatitis mainly in the Trauma and Acute Critical Care Center and provide comprehensive medical services including hepatic transplantation. Note that we do not accept patients with simple gallstones, who may not be treated in our hospital, including surgical procedures; however, gallstone patients with postoperative serious complications, e.g., patients with a ventricular assist device implanted, are accepted.

Breast and Endocrine Surgery

Specialized medical services

We treat patients with benign and malignant mammary gland and thyroid diseases. Surgical treatment, chemotherapy, hormonotherapy, molecular targeted therapy and radiotherapy are applied to patients with breast cancer based on evidence in cooperation with plastic surgeons, radiation oncologists and medical oncologists. Sentinel lymph node biopsy, breast reconstructive surgery, and endoscope-assisted surgery are also done, achieving fewer postoperative complications and cosmetic improvement. Surgical treatment is also performed on patients with benign and malignant thyroid tumors, as well as on patients with primary hyperparathyroidism.

Features

To prevent unnecessary axillary lymph node dissection during breast cancer surgery and consequent postoperative complications, sentinel lymph node biopsy has been performed on more than 200 patients annually. For cosmetic improvement, breast reconstructive surgery and endoscope-assisted breast surgery are actively performed (breast reconstructive surgery is done in about 40% of breast cancer surgeries). We actively conduct clinical studies for new drug development and physician-led clinical studies.

Considerations in referring your patients to Breast and Endocrine Surgery

Please refer your patients with the diseases mentioned above to us. Please ask your patients to bring materials including the report of test results, X-ray images, and microscope slides, if any, with them. We accept new patients on weekdays from Monday to Friday.

Pediatric Surgery

Neonatal Surgery

We diagnose many kinds of congenital anomalies and provide best treatment to the infants who require surgical treatment in the neonatal periods. We are actively performing prenatal diagnosis in cooperation with the department of Obstetrics.

Surgical Emergency

We are accepting emergency patients with acute abdomen who require surgical treatment on a 24-hour basis throughout the year.

Hepatic Surgery

We treat the patients with hepatobiliary diseases including biliary atresia and congenital biliary dilatation.

Endoscopic Surgery

We actively performing minimally invasive laparoscopic and thoracoscopic surgery on pediatric patients in order to minimize the surgical wounds.

Malignant Tumors

We provide interdisciplinary treatment to the pediatric patients with malignant solid tumors in cooperation with the department of Pediatrics.

Organ Transplantation

We actively perform pediatric organ transplantation, especially for liver transplantation and small bowel transplantation.

Gastrointestinal Tract

We treat patients with a wide range of gastrointestinal diseases from congenital anomalies such as intestinal atresia, imperforate anus, and Hirschsprung' disease to common diseases such as intussusception/appendicitis and ileus.

Home Enteral and Parenteral Nutrition

We provide home nutritional care services for pediatric patients with short-bowel syndrome, gastrointestinal dysmotility, and refractory diarrhea from the viewpoint of patient's development and growth.

Examinations for Pediatric Patients

We perform various kinds of examinations that require general anesthesia, such as upper gastrointestinal endoscopy, pediatric bronchoscopy, gastrointestinal manometry, 24-hour pH monitoring.

Features

Our clinical section has been a leader in pediatric surgical technology in Japan for many years. We have inherited these accumulated experiences, as well as expertise and skill, striving to provide medical care services as a core facility for advanced techniques to treat pediatric surgical patients in Japan. We are committed to treatment of patients with neonatal surgical diseases and malignant solid tumors, organ transplantation, as well as pediatric nutritional management, endoscopic surgery, and conduct research on these. Needless to say, we, as a leader in the community, actively provide medical care services for pediatric patients with general diseases who require surgical treatment.

At present, six supervisory doctors and eight medical specialists, who are certified by the Japanese Society of Pediatric Surgeons, work together in our clinical section. We are committed to providing surgical procedures to pediatric patients, focusing on patients' QOL and taking their growth into account, including endoscopic surgery, introduction of molecular target drug medication to treat pediatric cancers, promotion of hepatic/small bowel transplantation, regenerative medicine, and fetal therapy.

Considerations in referring your patients to Pediatric Surgery

Please feel free to contact us if you have difficulties in treating patients with pediatric surgical diseases. To make an appointment, please contact the Patient Support Center (Tel: 06-6879-5080, Fax: 06-6879-5081).

We accept patients with a wide variety of diseases ranging from general diseases, including hernia inguinalis and umbilical hernia, to emergency diseases, including acute appendicitis and acute abdomen. Please contact the Outpatient clinic of Pediatric Surgery to consult about patients whose diseases are difficult to diagnose, and patients with abdominal/anal diseases resistant to treatment by internal medicine, and patients requiring examinations (Tel: 06-6879-

5655, Fax: 06-6879-5659).

Out of office hours, at night, and on holidays, a pediatric surgeon on duty will accept patients (out of hours Tel: 06-6879-5111). Please contact the Medical office of Pediatric Surgery to consult about hospitalization and treatment/examinations.

Department of Diagnostic Pathology

Specialized medical services

Diagnosis in the department of pathology is done on the specimen from patients. We grossly and microscopically evaluate the specimen, and determine various points, such as whether the lesion is tumor or not, whether the tumor is malignant or benign, and whether the tumor cells are present in the cut end of surgically resected specimen. Because the diagnosis in our department is directly linked to the therapeutic strategy, the specialists certified by Japanese Society of Pathology do the diagnosis.

Features

The number of diagnosis in surgical pathology is over 10,000 cases and the number of cytological diagnosis is over 12,000 cases per year. Conferences between pathology and clinical sections are held everyday, and the diagnosis with the tool of molecular pathology is also done.

Considerations in referring your patients to diagnostic pathology

Please feel free to refer your patients to our department. In the case of second-opinion, please contact the clinical sections first.

Department of Woman, Child Health and Urology

Obstetrics & Gynecology

Obstetrics

We provide medical care services to pregnant women based on a policy of "avoiding unnecessary medical intervention with women in good condition, while always being ready to quickly and thoroughly intervene if needed." We recommend that both high-risk pregnant women with complications and healthy pregnant women visit our clinic in order to ensure a safe delivery. We can provide all sorts of obstetrical services including epidural anesthesia during parturition.

Gynecology

Every year, we treat more than 200 gynecologic malignancies such as cervical cancer, uterine cancer, ovarian cancer, uterine sarcoma and vulvar cancer. We perform laparoscopic surgery for uterine cancer and cervical cancer on early stage patients. With due safety in mind, we treat women who wish to preserve their fertility during early-stage cancers by trachelectomy (cervical cancer), high-dose progestin therapy (uterine cancer), and uterine-sparing surgery

(ovarian cancer), to preserve their reproductive capacity. We also perform minimally invasive operations (e.g. laparoscopic surgery, vaginal procedures) on patients with benign diseases. We actively conduct clinical studies on recalcitrant cancers such as recurrent ovarian cancer, recurrent uterine cancer, and advanced-stage cervical cancer in cooperation with Osaka University and our affiliated hospitals.

Specialist clinics

We provide general and maternity examinations on both healthy women and women with complications. Moreover, to address a wide variety of patient needs, specialty clinics have been created where obstetricians and gynecologists with a higher level of knowledge and experience treat outpatients from the standpoint of their specialty. This includes the "Clinic for Fetal Diseases," "Clinic for CIN Management," "Radiotherapy Clinic," "Infertility Clinic," "Climacteric Clinic," "Adolescent Clinic," and "Fetal Ultrasound Clinic." For couples with infertility issues, the Center for Reproductive Medicine provides examinations in cooperation with urologists.

Features

In Obstetrics & Gynecology, our objective is to treat patients based on clinical evidence. We manage pregnancy complications and provide fetal diagnosis/treatment from an interdisciplinary perspective in cooperation with the doctors from Internal Medicine, Surgery, Pediatrics, Pediatric Surgery and the Department of Genetic Counseling. A full supply of transfusion blood is also available. We have also provided emergency treatment to many pregnant women with placental diseases (placenta previa/accrete) and massive postpartum haemorrhage.

We have been treating patients with cervical cancer by combining surgical procedures and concurrent chemoradiotherapy, and has achieved a high survival rate. We have treated patients with ovarian cancer using a combination of thorough vigorous debulking surgery and chemotherapy, and achieved a high 5-year survival rate. We do risk classifications of patients with uterine cancer based on the pathological findings during procedures, in order to conduct as minimally invasive surgery as possible. We apply fertility preservation therapy to patients with various types of cancers and provide outpatient chemotherapy.

As part of fertility treatment, we efficiently perform artificial insemination and laparoscopy. IVF and ICSI are provided in collaboration with other institutions. In addition, the medical care services are provided to treat uterine myoma, including laparoscopic surgery and embolotherapy.

Considerations in referring your patients to Obstetrics & Gynecology

An obstetrician or gynecologist will examine the patient as a general consult on the first visit. Specialist clinics are operated as group clinics. Several OBGY residents and students are amongst the medical staff because of circumstances specific to university hospitals.

Pediatrics

Specialized medical services

Ten specialty groups provide specialized medical care services for pediatric patients referred from affiliated hospitals: Nephrology/Bone and Mineral Metabolism, Endocrinology, Hematology/Oncology, Neurometabolism/Clinical Genetics, Developmental Disorder/Sleep Disorders, Clinical Neurology, Nutrition/Growth, Pediatric Cardiology, Clinical Virology, and Newborn..

Nephrology/Bone and Mineral Metabolism

This specialty focuses on diseases related to the kidneys and bone metabolism. It includes:

Nephritis: Inflammation of the kidneys, often due to infections or autoimmune conditions.

Nephrotic Syndrome: A kidney disorder causing excessive protein loss in urine.

Chronic Kidney Failure: Gradual loss of kidney function over time.

Metabolic Bone Diseases: Conditions affecting bone strength, such as osteoporosis.

Skeletal Dysplasias: Rare genetic disorders causing abnormal bone growth and development.

Endocrinology

Endocrinology covers disorders related to hormone-producing glands. Conditions include:

Growth Disorders: Issues affecting normal height and development in children.

Pituitary/Thyroid/Parathyroid Diseases: Disorders of these glands affecting metabolism and calcium balance.

Gonadal and Adrenal Diseases: Hormonal imbalances affecting sexual development and stress responses.

Diabetes Mellitus: A chronic condition characterized by high blood sugar levels due to insulin issues.

Hematology and Oncology

This specialty deals with blood and cancer-related conditions, such as:

Hematological Malignancy: Blood cancers like leukemia or lymphoma.

Malignant Solid Tumors: Cancers that form in solid organs like bones or muscles.

Aplastic Anemia: A rare condition where the bone marrow stops producing enough blood cells.

Immune Deficiency Diseases: Disorders weakening the immune system's ability to fight infections.

Neurometabolism/Clinical Genetics

Focuses on genetic and metabolic disorders, including:

In-Born Errors of Metabolism: Genetic conditions like lysosomal diseases and glycogen storage disorders that disrupt normal metabolic processes.

Congenital Anomalies: Birth defects affecting physical or functional development.

Inherited Diseases: Genetic disorders passed down through families.

Developmental Disorder/Sleep Disorders

Specialists address developmental and sleep-related issues such as:

Autism Spectrum Disorders: Neurodevelopmental disorders affecting communication and behavior.

Attention Deficit/Hyperactivity Disorder (ADHD): A condition causing attention difficulties and hyperactivity.

Pediatric Sleep Disorders: Sleep disturbances affecting children's health and development.

Clinical Neurology

This field handles neurological conditions, including:

Epilepsy: A brain disorder causing recurring seizures.

Movement Disorders: Issues affecting coordination and motor control.

Developmental Delay: Delayed milestones in speech, movement, or cognitive abilities.

Muscle Diseases: Conditions impacting muscle strength and function.

Nutrition/Growth

Focused on nutritional and growth-related concerns such as:

Nutritional Disorders: Problems like malnutrition or obesity in children.

Growth Disorders: Abnormal growth patterns caused by hormonal or nutritional factors.

Digestive/Hepatic Diseases: Conditions affecting the stomach, intestines, or liver.

Pediatric Cardiology

Specialists in this area treat heart conditions in children, including:

Congenital Heart Disease: Heart defects present at birth.

Cardiomyopathy: A disease of the heart muscle affecting its function.

Arrhythmia: Abnormal heart rhythms.

Pulmonary Hypertension: High blood pressure in the lungs' arteries.

Clinical Virology

Focuses on managing viral diseases in pediatric patients:

Vaccination: Administering vaccines to children with underlying medical conditions to prevent infections.

Newborn

This specialty provides follow-up care for high-risk newborns, including:

Monitoring growth and development.

Addressing complications from premature birth or congenital conditions.

New patients with diseases not included in the above-mentioned groups may undergo a medical examination in our general clinic.

Features

The ten specialty groups cover main specialized medical areas of pediatrics, providing advanced medical care services for patients. We have accepted many patients referred from hospitals as an advanced pediatric medical care institution and have employed advanced medical techniques: diagnosis of patients with skeletal dysplasias, diagnosis and treatment of patients with nephritis and nephrotic syndrome by renal biopsy, management of peritoneal dialysis for patients with chronic renal failure, diagnosis and treatment of patients with endocrine diseases, diagnosis of digestive diseases by endoscopy and liver diseases by liver biopsy, treatment of patients with severe chronic liver diseases and acute liver failure, management of patients with liver transplantation, stem cell transplantation for patients with hematological malignancy and malignant solid tumors, enzyme replacement therapy for lysosomal diseases, examination for

surgical indications and internal medication for intractable epilepsy, diagnosis of patients with neuromuscular diseases by muscle biopsy, diagnosis and management of patients with severe congenital heart diseases, pulmonary hypertension and cardiomyopathy, management of patients with heart transplantation, diagnosis of patients with autism spectrum disorders and sleep disorders, and follow-up and medical management of preterm infants and Down syndrome patients.

Considerations in referring your patients to Pediatrics

The first visit needs an appointment. Please make sure to contact the Patient Support Center to obtain an appointment. For patients who need to be urgently admitted to our hospital, please be sure to contact the outpatient clinic in advance.

Urology

Specialized medical services

We provide medical care services to all patients with a wide variety of diseases in the kidneys, urinary duct, bladder, and male genitalia.

By disease category, we treat malignant tumors, male infertility, urinary disturbance, and renal transplantation, as well as male climacteric disorder. In particular, surgical procedures are performed on about 400 patients each year with malignant tumors, and we actively perform robot-assisted surgery and minimally-invasive laparoscopic surgery. To treat prostate cancer, of which incidence has increased recently, not only surgical procedures but also many interdisciplinary therapeutic options including external irradiation, internal irradiation, and brachytherapy may be applied to patients in cooperation with Clinic of Radiotherapy. Recently, we have also begun performing stereotactic irradiation using a cyber knife. For urinary disturbance, which reflects the progressive aging of society, the most-advanced medical instrument for examination has been installed to make definite diagnosis; accordingly, the medical care and health care services appropriate for individual patients are provided. We also actively perform HoLEP surgery for benign prostatic hyperplasia. We conduct partial nephrectomies robotically for small diameter renal cancer, and can employ cryotherapy if surgery is difficult due to complications. Our assisted reproductive technology for male infertility and graft survival rate for renal transplantation lead the urological area in Japan.

Features

Most urological diseases have increased with progressive aging of society. In contrast, male infertility and malignant tumor of the testis are likely to develop in adult people. Thus, we treat patients of a wide age group. We strive to provide top-level of medical care services using the most advanced medical techniques and emphasizing patients' quality of life (QOL). We have superior outcomes to other general medical facilities after prostate cancer surgery, for example, in post-operative urinary incontinence and restorative rate of erectile function. Our hospital, moreover, is the first qualified medical facility for brachytherapy for prostate cancer in

the Kansai region. This medical technique is a potent therapeutic alternative to radical prostatectomy, together with high-dose internal irradiation, which has been proven over a long term.

Notice of the introduction of da Vinci, a robot assisted laparoscopic surgery

Da Vinci, a robotic support system for endoscopic surgery, was introduced at Osaka University Hospital in October 2012, and robot-assisted endoscopic total prostatectomies for prostate cancer have been performed since November 2012.

In addition to the prostate, we are currently performing robot-assisted endoscopic partial nephrectomy for small-diameter renal cancer, and total cystectomy is also performed with robot-assisted endoscopy.

Considerations in referring your patients to Urology

We can treat patients with almost all types of urologic and reproductive disorders. Please feel free to contact the Patient Support Center.

Orthopaedic Surgery

Specialized medical services

A team of doctors from nine specialized orthopaedic surgery groups provides outpatients with a high level of specialized medical services, treating: tumors, hip joint diseases, rheumatoid arthritis, knee joint disease, shoulder joint diseases, spinal diseases, pediatric orthopedic diseases, hand diseases, and sports injuries.

The treated diseases include:

Tumors

Bone tumors, soft tissue tumors, metastatic bone tumors

Hip joint diseases

Hip osteoarthritis, hip dysplasia

Rheumatoid arthritis

Rheumatic diseases, osteoarthritis of the foot

Knee joint disease

Osteoarthritis of the knee

Shoulder joint diseases

Rotator cuff tears, recurrent shoulder dislocation, pitching shoulder disorder

Spinal diseases

Cervical spondylotic radiculopathy/myelopathy, lumbar canal stenosis, lumbar disc herniation

Pediatric orthopaedic diseases

Clubfoot, congenital dislocation of the hip, bowleg, leg length discrepancy

Hand & upper limb diseases

Elbow/forearm/hand/finger osteoarthropathy and myotendinopathy, peripheral neuropathy, hand congenital malformation

Sports injuries

Knee and ankle joint ligament injuries, knee meniscus injuries, patella dislocation, osteochondritis dissecans, overuse

Special disorders

The team of doctors from specialized orthopaedic surgery groups treats outpatients suffering from the specialized diseases listed below:

Tumors

Primary pelvic bone tumor, etc.

Hip joint diseases

Idiopathic osteonecrosis of the femoral head, loose artificial hip joint, etc.

Rheumatoid arthritis

Rheumatoid arthritis with deformation of the ankle

Shoulder joint diseases

Shoulder instability, etc.

Spinal diseases

Ossification of spine ligament, etc.

Pediatric orthopaedic diseases

Dwarfism associated with skeletal dysplasias

Hand & upper limb diseases

Post-injury deformation of upper limb, brachial plexus injury, hand tumors, etc.

Sports injuries

Multi-ligamentous knee injury, cartilage injuries, etc.

We proactively introduce robot- or computer-assisted surgery in implant arthroplasty and corrective osteotomy, attaining satisfactory treatment outcomes.

Considerations in referring your patients to Orthopaedic Surgery

We accept, in principle, referrals only from doctors of orthopaedic surgery (adult diseases), and pediatrics/obstetrics and gynecology (pediatric diseases). Other referrals may be accepted only with the consent of the doctor in attendance, taking exceptional circumstances into account. For referrals to spinal surgery, appointments are determined by our specialized surgeon; accordingly, it takes one to four days to receive a reply from the Patient Support Center. Your referrals, X-ray/CT/MRI images are helpful in facilitating diagnosis and treatment of both new and revisiting patients. Please prepare these materials and ask your patients to bring the materials with them.

Department of Sensory, Cutaneous and Motor Organ Medicine

Ophthalmology

Specialized medical services

Cornea

We provide the highest level of corneal treatment to patients, mainly corneal transplantation, but also treatment for corneal infections and dry eye, as well as refractive surgery. In particular, we are committed to the latest corneal parts transplantation (partial lamellar keratoplasty) such as descemet stripping endothelial keratoplasty, deep lamellar keratoplasty, limbus transplantation, and membrane transplantation. Moreover, we developed the world's first corneal regenerative treatment including tissue-engineered cell sheet transplantation and tissue-engineered oral-mucosal sheet transplantation, and accept many patients in Japan, as well as patients from foreign countries.

Surgical retina

We perform retinal detachment surgery and vitreous surgery in patients with severe fundus diseases including retinal detachment, diabetic retinopathy, degenerative myopia, retinal vein occlusion, and proliferative vitreoretinopathy. Moreover, we have performed sutureless small incision vitreous surgery on many patients with macular diseases such as macular hole, epiretinal membrane, and macular edema using the 23-27G system on the basis of day case or short-term hospitalization, achieving the early recovery of visual function through minimally invasive surgery.

Medical retina

We are committed to treatment by internal medicine including drug medication and photodynamic therapy for patients with various types of macular diseases such as age-related macular degeneration, as well as antibody therapy for patients with uveitis, and topical drug

application for patients with refractory uveitis and infectious uveitis. We also energetically diagnose primary vitreoretinal lymphoma, which has increased recently, and treat this disease.

Glaucoma

We are committed to treatment and surgery on patients with all types of refractory glaucoma; in particular, we use the latest treatment techniques such as diagnostic imaging equipment, e.g., OCT, and antibody therapy to treat patients with neovascular glaucoma, angle-closure glaucoma, glaucoma associated with myopia, and pseudo exfoliation glaucoma at a high-precision level. Follow-up is performed on mild cases in cooperation with the ophthalmologists who referred the patient to us.

Strabismic amblyopia/neuro-ophthalmology/pediatric ophthalmology

Treats patients with pediatric/adult strabismus, retrobulbar neuritis, ischemic optic neuropathy, and Grave's disease. New visual function examinations are performed, including stereoscopic test in peripheral vision. We are proud of treating patients with intractable optic nerve diseases using our original technique of transcorneal electrical stimulation.

Features

We introduced the specialized outpatient clinic system for the first time in Japan and have continued the system, providing high-quality medical care services to patients with almost all ophthalmologic diseases.

We performed more than 4,000 operations in 2019. Specifically, cataract surgery more than 2,000 cases, followed by more than 800 vitreous surgeries, about 400 glaucoma surgeries, more than 200 operations correcting strabismus, and over 100 corneal transplants, in addition to various operations such as ophthalmoplasty and lacrimal surgery.

Otorhinolaryngology-Head and Neck Surgery

Specialized medical services

We accept all patients with diseases covered by Otorhinolaryngology-Head and Neck Surgery (ear, nose/nasal sinuses, oral cavity, pharynx, larynx, neck and others). Specialist clinics in the following medical fields have been formed, striving to provide high-quality medical care services.

Tumor clinic: We treat about 200 patients with head and neck tumors annually. To treat patients with malignant tumors, all medical techniques, including surgical treatment, radiotherapy, and chemotherapy, are fully used to conserve the affected organ. Moreover, treatment policies are determined so that the patient's voice and swallowing may be kept as far as possible. We actively perform cranial base surgery.

Impaired hearing clinic: Surgical treatment is performed on more than 150 patients with chronic otitis media, chronic otitis media with cholesteatoma, and otosclerosis annually.

Cochlear implantation is performed on patients with bilateral profound deafness. Drug medication and surgical treatment are performed on patients with sudden deafness and patients with facial palsy, respectively.

Dizziness clinic:

This clinic diagnoses and treats patients with a wide range of conditions of dizziness including dizziness associated with inner ear function, e.g., Meniere's disease. Surgical treatment may be performed on patients with intractable Meniere's disease.

Nose/nasal sinus clinic:

This clinic performs endoscopic surgery on more than 100 patients annually, mainly for nasal and nasal sinus diseases. A navigation system is used to safely treat high-risk anatomical sites. Endoscopy is also utilized in treating patients with maxillofacial fractures and lacrimal sac diseases. In addition to surgical therapy, we provide treatment with biological agents for refractory chronic rhinosinusitis. For allergic rhinitis, we offer not only drug therapy but also allergen immunotherapy and surgical treatment, either separately or in combination.

Vocal impairment/swallowing/respiratory tract clinic:

We primarily focus on the general treatment of voice disorders, but we particularly specialize in surgical treatment for vocal cord paralysis, laryngeal papilloma, and glottic stenosis. We also offer vocal cord injection therapy and speech rehabilitation on an outpatient basis. Evaluation and surgical treatment for swallowing disorders are carried out in collaboration with our Swallowing Center.

Infantile deafness clinic

Various kinds of test equipment are used to assess the hearing of infant patients to examine whether hearing aid attachment or cochlear implantation is appropriate for them. The clinic maintains close cooperation with otorhinolaryngologic clinics and special schools for the deaf in the community.

Features

We provide high-quality medical care services to patients with all otorhinolaryngologic/head and neck diseases ranging from head and neck cancer to profound deafness and intractable dizziness. Moreover, we aim to establish close relationships with other hospitals and clinics, striving to provide medical care services that are optimal for patients.

Considerations in referring your patients to Otorhinolaryngology- Head and Neck Surgery

Please ask new patients you refer to us to bring a referral letter with them and submit it to the appropriate specialist clinic or attending doctor if possible. Otherwise, the patients must have

consultation and be given examinations in the general clinic before they can make an appointment at the specialist clinic

Orthopaedic Surgery

Specialized medical services

A team of doctors from nine specialized orthopaedic surgery groups provides outpatients with a high level of specialized medical services, treating: tumors, hip joint diseases, rheumatoid arthritis, knee joint disease, shoulder joint diseases, spinal diseases, pediatric orthopedic diseases, hand diseases, and sports injuries.

The treated diseases include:

Tumors

Bone tumors, soft tissue tumors, metastatic bone tumors

Hip joint diseases

Hip osteoarthritis, hip dysplasia

Rheumatoid arthritis

Rheumatic diseases, osteoarthritis of the foot

Knee joint disease

Osteoarthritis of the knee

Shoulder joint diseases

Rotator cuff tears, recurrent shoulder dislocation, pitching shoulder disorder

Spinal diseases

Cervical spondylotic radiculopathy/myelopathy, lumbar canal stenosis, lumbar disc herniation

Pediatric orthopaedic diseases

Clubfoot, congenital dislocation of the hip, bowleg, leg length discrepancy

Hand & upper limb diseases

Elbow/forearm/hand/finger osteoarthropathy and myotendinopathy, peripheral neuropathy, hand congenital malformation

Sports injuries

Knee and ankle joint ligament injuries, knee meniscus injuries, patella dislocation, osteochondritis dissecans, overuse

Special disorders

The team of doctors from specialized orthopaedic surgery groups treats outpatients suffering from the specialized diseases listed below:

Tumors

Primary pelvic bone tumor, etc.

Hip joint diseases

Idiopathic osteonecrosis of the femoral head, loose artificial hip joint, etc.

Rheumatoid arthritis

Rheumatoid arthritis with deformation of the ankle

Shoulder joint diseases

Shoulder instability, etc.

Spinal diseases

Ossification of spine ligament, etc.

Pediatric orthopaedic diseases

Dwarfism associated with skeletal dysplasias

Hand & upper limb diseases

Post-injury deformation of upper limb, brachial plexus injury, hand tumors, etc.

Sports injuries

Multi-ligamentous knee injury, cartilage injuries, etc.

We proactively introduce robot- or computer-assisted surgery in implant arthroplasty and corrective osteotomy, attaining satisfactory treatment outcomes.

Considerations in referring your patients to Orthopaedic Surgery

We accept, in principle, referrals only from doctors of orthopaedic surgery (adult diseases), and pediatrics/obstetrics and gynecology (pediatric diseases). Other referrals may be accepted only with the consent of the doctor in attendance, taking exceptional circumstances into account. For referrals to spinal surgery, appointments are determined by our specialized surgeon; accordingly, it takes one to four days to receive a reply from the Patient Support Center. Your referrals, X-ray/CT/MRI images are helpful in facilitating diagnosis and treatment of both new and revisiting patients. Please prepare these materials and ask your patients to bring the materials with them.

Dermatology

Specialized medical services

We practice general dermatology, in particular providing detailed, specialized and advanced medical care for atopic dermatitis, urticaria, collagen diseases, general skin malignancies, mycosis fungoides, cutaneous ulcers, psoriasis, alopecia, drug eruption, vitiligo, bullous bullosa, as well as hereditary skin diseases such as Ito vitiligo, tuberous sclerosis, Recklinghausen's disease, congenital dyskeratosis and epidermolysis bullosa, and phakomatosis.

Outpatient services are provided to patients with atopic dermatitis, and some may be briefly hospitalized to investigate the cause of aggravated eczema and for patient education. In our relationship with affiliated hospitals, This clinical section serves as a regional designated hospital to treat patients with atopic dermatitis in the areas around Osaka.

For collagen diseases, we mainly focus on the diagnosis and treatment of systemic lupus erythematosus, scleroderma, dermatomyositis, and Sjogren's syndrome. Treatments include internal medicine, mainly steroids and immunosuppressants, and immunoglobulin and endoxan infusions are also conducted with hospitalization.

For psoriasis, we conduct screening examinations for the causes of aggravation, psoriatic arthritis, nail psoriasis and other examinations depending on the patient's skin symptoms, and in addition to topical treatment according to the patient's condition, we conduct treatment with ultraviolet rays, immunosuppressants and biological preparations.

Tuberous sclerosis complex is treated in cooperation with other sections on the 'TSC Board'.

Features

For atopic dermatitis, we conduct comprehensive treatment that incorporates aggravation factor searches, and sweating function and skin barrier function evaluations. For food allergies, we conduct detailed searches for the cause, including load tests. For urticaria, in addition to specialized diagnosis of each disease type, we actively examine and treat cholinergic urticaria. For drug eruption, we are involved in creating a database of causative drugs, and in diagnosing and treating various drug eruptions including severe drug eruptions. A special outpatient clinic for vitiligo vulgaris has been established which proactively carries out the most advanced treatment using ultraviolet irradiation equipment called excimer light. Diagnosis and treatment of malignant skin tumors such as malignant melanoma, basal cell carcinoma and squamous cell carcinoma are performed comprehensively, and a special outpatient clinic for lymphoma has been established, where diagnoses of hematological tumors originating from the skin are confirmed diagnosis and treatment strategies are planned.

Although angiofibroma associated with tuberous sclerosis has no established treatment method other than surgery, we have developed a topical form of rapamycin as a safe, effective and simple therapeutic agent, which was already released.

In addition, we plan to conduct a doctor-initiated clinical trial with a combination of human Sendai virus vector and anti-PD-1 antibody against advanced malignant melanoma.

Considerations in referring your patients to Dermatology

All new patients must consult a doctor who provides examinations for first-time patients for their first examination.

The patients are referred to our specialist clinic only if necessary.

Plastic Surgery

Specialized medical services

Congenital external malformations to be treated include the following.

Malformations that develop on the body surface, such as craniofacial dysostosis, cleft lip and cleft palate, eyelid ptosis, microtia, cryptotia, polydactyly, syndactyly, pectus excavatum, hypospadias, ambiguous genitalia (disorder of external genitalia differentiation), protuberant navel, etc.

Skin color disorders such as black mole, nevus spilus, hemangioma, etc. (Note that we do not use lasers to treat patients with birthmarks. Where laser therapy is needed, we make it a rule to refer the patients to our affiliated hospitals in the community.)

Disorders of body odor such as osmidrosis.

Acquired external abnormalities to be treated include the following.

Tissue deficiency, scars, deformity, cicatricial alopecia, skin ulcer, facial fracture, facial paralysis, finger amputation, deficiency of thumb or finger, deficiency of nail, ingrown nail, pincer nail, etc.

Benign and malignant tumor of the skin, subcutaneous tissue, skeletal muscle, parotid gland, orbit, etc.

Lower-limb varix, lymphedema, chronic perianal pyoderma, thyroid ophthalmopathy, etc. Deficiency of the esophagus, deficiency of the bronchi, tracheostenosis, tracheocutaneous fistula, etc., caused by head and neck cancer operations, breast defects caused by breast cancer operations, abdominal hernia, dead space after removal of pelvic viscera, and rectovaginal fistula, all of which are treated at the request of other clinical sections.

Features

Among our originally-improved common treatments, the following surgical operations have been reported in U.S. and European specialty journals: thyroid ophthalmopathy, breast defects caused by breast cancer operations, gynecomastia, facial paralysis, pharyngostenosis caused by head and neck cancer operations, congenital peritoneal rupture, tracheocutaneous fistula, rectovaginal fistula, hypodactyly, syndactyly, and malignant melanoma.

Our mission is to strive to provide individual patients reliably and efficiently with the most appropriate medical care services without settling for conventional common surgical operations as they are.

Rehabilitation Medicine

Specialized medical services

The Rehabilitation Medicine was established on January 1, 2016. It is composed of: a director, a deputy director, 3 residents and 27 technical staffs (19 physical therapists, 5 occupational therapists and 3 speech therapists). Physical therapy addresses impaired motor function (muscular strength, joint range of motion, coordination, cardiopulmonary insufficiency, etc.) and the recovery of basic movement capabilities (rolling over, sitting, standing, walking, etc.). The section provides medical treatment and training using physiotherapy, therapeutic exercise, basic movement training, and the like to enable such recovery. The section has the equipment needed to assess motor functions objectively such as instruments for motion analysis and cardiorespiratory analysis. Occupational therapy provides an assessment of problems with applied motor skills (eating, straightening one's posture, changing one's clothes, excretion, bathing, housework, writing, etc.) due to physical disability or higher brain dysfunction, along with treatment and exercises aimed at the recovery of those abilities. Also, to assess problems with movement, facilities are available that include toilet, bath, and Japanese-style room facilities with instrumentation. The section also provides guidance to families on how to properly assist elderly people and use assistive products--a necessary function for an aging society. In speech-language-hearing therapy, communication impediments such as speech problems, lisps, voice disorders, or higher brain dysfunction are assessed, and treatment or exercises are prescribed and taught. In addition, rehabilitation is conducted in consultation with doctors and nurses for problems with eating or swallowing that may occur along with speech impediments. Additionally, family members and caregivers are given specific guidance as required on how to communicate with the patient or how to handle their problems with eating or swallowing.

Features

The Rehabilitation Medicine provides rehabilitation therapy to help patients improve or recover abilities when they are having trouble with motor functions, performing daily tasks, or communicating. In rehabilitation therapy, the periods after the onset of symptoms or injury are classified by the Ministry of Health, Labour and Welfare as: the acute phase, recovery phase, and maintenance phase (living stage). Osaka University Hospital primarily provides rehabilitation for hospitalized patients in the acute phase. Rehabilitation physicians provide medical examinations to patients with motor function or communication impediments caused by various disorders and prescribe rehabilitation after determining that physical therapy, occupational therapy, or speech-language-hearing therapy would be effective. Among the physical therapists three are expert physical therapists, five are certified physical therapists, four are cardiac rehabilitation instructors, and six are certified respiratory therapists.

And among the occupational therapists one is certified respiratory therapist.

The hospital also accepts the following qualifications recognized by the Ministry of Health, Labour and Welfare.

- 1. Cardiovascular rehabilitation (I)
- 2.Cerebrovascular disease rehabilitation (I)
- 3. Disuse syndrome rehabilitation (I)
- 4.Locomotor rehabilitation (I)
- 5. Respiratory organ rehabilitation (I)
- 6.Cancer patient rehabilitation

Department of Clinical Neuroscience

Neurology and Cerebrovascular Diseases

Specialized medical services

We provide medical care services to many patients with degenerative diseases such as Parkinson's disease, amyotrophic lateral sclerosis (ALS), spinocerebellar degeneration, and dementia; autoimmune nervous diseases such as multiple sclerosis (MS) and myasthenia gravis; metabolic muscle diseases such as mitochondrial encephalomyopathy; peripheral neuropathy such as Guillain-Barre syndrome, chronic inflammatory demyelinating polyneuropathy (CIDP), and Charcot-Marie-Tooth disease; epilepsy, migraine and involuntary movement.

To treat cerebrovascular disorder (stroke), non-invasive test methods including imaging procedure and ultrasonography are applied to patients who are at the chronic stage or at risk of showing no symptoms, in order to provide the most suitable primary/recurrent stroke prevention. At the acute stage, we strive to proactively apply thrombolytic therapy with tPA intravenous injection, rapid diagnosis of disease type, and acute-stage rehabilitation to stroke patients. The number of beds was increased to three in the SCU in 2010 to provide stroke patients at the acute stage with further improved medical services, including treatment, nursing care, and rehabilitation services.

As described above, we treat patients with all neurological diseases excluding psychiatric disorders.

Features

We provide the therapy most appropriate for each pathological condition; for example, advanced medical care services to patients with degenerative diseases including Parkinson's disease; thorough rehabilitation; improved functional prognosis; botulinum toxin treatment for patients with involuntary movement; and self-injection therapy with interferon and intravenous immuno globulin (IVIG) in patients with neuroimmunological diseases.

In addition to the Trauma and Acute Critical Care Center and Neurosurgery, the Stroke Center formed in 2005 promptly treats acute-stage stroke patients.

We diagnose and treat patients with neurological disease induced by neuro-Behcet's disease, sarcoidosis, collagen disorders, and diabetes mellitus in cooperation with other clinical sections concerned.

Neuropsychiatry

Specialized medical services

We provide medical care services to a wide range of patients, from those with neuropsychiatry diseases such as schizophrenia, mood disorder, anxiety disorder, dementia, epilepsy, stress disorder, eating disorder, and sleep disorder, to those who have neuropsychiatry problems such as the need for liaison psychiatry and adolescent problems.

In addition to a general clinic, we have specialist clinics to treat patients with neuropsychological diseases (forgetfulness, dementia, higher brain dysfunction), schizophrenia, child psychiatric disease, adolescent disease, and sleep disorder.

We are taking advantage of characteristics of Osaka University Hospital to provide the latest treatment from clinical trial phase and medical care services aiming to elucidate and overcome psychiatric disorders.

Features

The neuropsychology clinic performs complete checking on patients with forgetfulness, and careful evaluation and treatment of patients with dementia or higher brain dysfunction. Depending on the demands of patients, we provide a three-day hospitalization for assessments, in addition to that including a 2or3-week treatment.

The schizophrenia clinic performs specialized assessments for early-stage diagnosis of schizophrenia and evaluates existing methods of treatment and intervention in intractable cases. We also have a treatment by actively using Clozaril.

The child psychiatric and adolescent disease clinic conducts psychotherapy in patients under 18 of age and in patients at 18 or above, respectively.

The sleep disorder clinic (one section of the Sleep Medical Center) provides specialized diagnosis and treatment of sleep apnea syndrome (SAS), narcolepsy, and other sleep disorders, as well as short-term hospitalization for assessments.

- * The dementia clinic and the schizophrenia clinic accept referrals from other medical care facilities and nursing-care facilities in the community to carry out assessments on the patients. The results of these assessments are reported to the physicians in charge and the patients. The patients go back to their facilities to continue the treatment. The results of assessments are used in research to elucidate the pathological conditions of dementia and schizophrenia and develop treatment techniques for these diseases.
- * The child psychiatric disease clinic accepts only patients referred from specialty care facilities in the community, such as clinics and hospital sections specialized in psychiatric medicine or psychosomatic medicine. Our objective is to give the definite diagnosis of psychiatric diseases and treat patients with these diseases at the acute stage, supporting long-term treatment in the community. As mentioned above, we accept referred patients, assuming that the referred

patients go back to their hospital in the community after their condition has stabilized to continue treatment. Your cooperation is greatly appreciated.

* The sleep disorder clinic (a division of the Sleep Medical Center) deals with sleep disorders (special diseases of sleep) such as sleep apnea syndrome, narcolepsy, REM sleep behavior disorder, and restless legs syndrome. Referrals are made when a local psychiatrist or psychosomatic specialist has examined the patient and suspects a sleep disorder. So-called "insomnia" and insomnia and difficulty waking up due to disturbed rhythm of life, and insomnia and hypersomnia due to psychiatric disorders (mood disorder and stress disorder) are not covered by the sleep disorder clinic.

Considerations in referring your patients to Neuropsychiatry

In principle, we accept only referred patients. The adequate appointment time schedule for first-time visitors has been reserved. For the referred patients to receive our consultation, their physicians in charge need to make an appointment for them. This can largely reduce their waiting time and allows the individual patients to receive consultation directly by a specialist appropriate for his/her disease.

In principle, specialists are staffed to treat outpatients with any psychiatric diseases, however, keep in mind that not all are available every day. Please make an appointment and prepare for referral letters describing the medical records of the patient. The referred patients themselves have to visit our clinical section at the first time with the referral letter. If not, they cannot receive consultation.

Appointments for outpatients with "chronic fatigue syndrome" are unavailable because no specialist is present.

【Considerations in referring your patient to sleep disorder clinic】

Since June 13, 2022, the Sleep disorder clinic has prepared a special referral form for the sleep disorder clinic. Please ask your family doctor to prepare a letter of referral using the dedicated referral letter format(sleep disorder clinic).

Neurosurgery

Specialized medical services

Our neurosurgery section provides medical services to patients with various kinds of neurosurgical diseases, each of which is treated by neurosurgeons in their various specialized fields.

Neurofunctional diseases: Specialist surgeons provide medical care to patients with disorders relating to neurological functions, including epilepsy, Parkinson's disease, intractable pain (e.g., thalamic pain), facial spasms, trigeminal neuralgia, spasticity, and spastic paralysis, etc.

Cerebrovascular diseases: Specialized neurosurgeons undertake operative or intravascular surgical (catheter intervention) procedures on patients with cerebral aneurysms, cerebral arteriovenous malformations, cerebrovascular occlusion/stenosis, and moyamoya disease, etc.

Brain tumors: Specialized neurosurgeons provide treatment for all brain tumors, including gliomas, meningiomas, and skull base tumors.

Spinal diseases: Specialist surgeons treat disk herniation, spinal canal stenosis, spinal tumors, syringomyelia and other spinal diseases, mainly with microsurgery.

Pediatric neurosurgical diseases: Pediatric neurosurgeons provide surgical treatment of congenital anomalies such as pediatric central nervous system tumors, hydrocephalus, spina bifida (myelomeningocele, spinal lipoma), craniosynostosis, Chiari malformation, and craniovertebral junction stenosis.

In cases of emergency involving patients with head trauma, acute-stage stroke, etc., please contact the Trauma and Acute Critical Care Center at our hospital.

Features

Various kinds of treatments are applied to patients with neurofunctional diseases; for example, brain or spinal cord stimulation and transcranial magnetic stimulation to treat intractable pain, vagal stimulation for epilepsy, intrathecal administration of baclofen for spasticity, and botulinum injections for facial spasms and spastic torticollis.

Cerebrovascular diseases are treated either by direct surgery or intravascular treatment. Craniotomy/clipping or coil embolization is performed for aneurysms, and endarterectomy and stent placement are available for internal carotid artery stenosis. We also actively treat vascular malformations such as cerebral arteriovenous malformations and dural arteriovenous fistulas.

We perform multidisciplinary treatments (appropriate combinations of surgery, radiotherapy and medication) for all kinds of brain tumors, applying various advanced technologies and knowledge. We also conduct various clinical studies and clinical trials of new drugs.

We provide minimally invasive treatment tailored to the condition, focusing on spinal cord tumors, craniovertebral junction disorders and spinal degenerative diseases, with curability and the preservation of nerve function as the primary considerations. Surgically, we perform delicate and accurate decompression/extraction procedures by microscope and endoscope. Internal fixation is also carried out with appropriate instrumentation.

Considerations in referring your patients to Neurosurgery

In response to requests from area medical facilities, we have opened a first visit outpatient clinic. As a rule, we do not accept head injuries or traffic injuries. If there are special circumstances, they may be accepted after consultation with a neurosurgeon. If a doctor is not specified, a suitable doctor will be selected according to the content of the referral letter.

Bringing the referral letter and any images such as X-ray, CT or MRI to both the first visit and the specialized outpatient clinic will allow diagnosis and treatment to proceed smoothly.

Anesthesiology

Specialized medical services

We provide medical treatment and care to patients with chronic pain (postherpetic neuralgia, lumbar disk herniation, spinal canal stenosis, trigeminal neuralgia, chronic headache, complex regional pain syndrome (CRPS), phantom pain, post-stroke pain, etc.), and cancer pain. We perform pharmacotherapy, minimally invasive interventional pain therapy (nerve block, epiduloscopy, IDET, percutaneous nuclectomy, spinal cord stimulation, etc.), and psychological therapy to treat inpatients and outpatients.

In cooperation with Orthopaedic Surgery, Neurosurgery, Neurology and Cerebrovascular Diseases, Rehabilitation, and Palliative Care Team, we are able to treat a wide variety of pain.

Features

Pain specialists can safely apply nerve block therapy to patients as needed in the X-ray examination room built in the outpatient consultation room.

We perform gasserian ganglion thermocoagulation under general anesthesia to treat trigeminal neuralgia.

You can be hospitalized for short periods to receive minimally invasive interventional pain therapy.

We are performing advanced treatments including intradiscal electrothermal therapy (IDET) to treat discogenic low back pain.

In addition, we strive to provide the appropriate medical care to improve the QOL for the individual CRPS patients.

Considerations for patients referred to Anesthesiology

Please bring your referral form and the list of your medications (prescribed and OTC), as well as laboratory data and images.

Department of Radiology

Diagnostic and Interventional Radiology

Specialized medical services

Our section offers minimally invasive non-surgical procedures of interventional radiology (IVR). We treat a variety of diseases including tumors and vascular lesions through small catheters or needles through image guidance using angiography, ultrasound, or CT scans. We use the latest medical techniques: chemoembolization, radiofrequency ablation, and arterial infusion chemotherapy for liver tumors; biliary drainage and stenting; balloon-occluded retrograde transvenous obliteration (B-RTO) and transjugular intrahepatic portasystemic shunt (TIPS) for

gastric varices or portal hypertension; angioplasty and stenting for peripheral vascular diseases (PAD) and renovascular hypertension; IVC filter placement; and embolization for vascular malformations, visceral aneurysms, aortic endoleaks and varicose veins. As on-call responsibilities, we also apply IVR for emergency patients with acute gastrointestinal bleeding, hemoptysis, postpartum hemorrhage, intractable epistaxis, and trauma.

Features

We actively perform embolotherapy and sclerotherapy to treat congenital vascular anomalies, as one of the few specialized facilities in Japan. These anomalies include peripheral arteriovenous malformations (AVM) and venous malformations, which are often difficult to treat by surgery. We are also engaged in IVR for benign conditions, including uterine artery embolization (UAE) for uterine myoma in cooperation with Obstetrics and Gynecology, and varicocele embolization associated with male infertility in cooperation with Urology. In addition, to improve the quality of life of advanced cancer patients, we offer palliative procedures such as central venous port implantation and embolization or radiofrequency ablation of metastatic bone tumors for pain relief.

Considerations in referring your patients to Diagnostic and Interventional Radiology

Your patient needs to make an appointment for consultation. Generally, it takes about 30 minutes for the initial visit and 15 minutes for subsequent visits. Please note that there might be a waiting time for the initial visit. For evaluating the treatment indication and planning, please ask your patients to bring the film or a CD-R of diagnostic images taken at your facility. These images may be copied and kept at our facility.

Radiotherapy

Specialized medical services

Radiation therapy has become one of the main treatments for malignant tumors. In our department, radiation therapy has been applied to various diseases mainly on malignant tumors. In addition, benign diseases, such as keloid and schwannoma, have been also treated. In general, radiation therapy has been divided into external beam radiotherapy using X-rays and brachytherapy using a small radiation isotope. In external beam radiation therapy in our department, not only three-dimensional irradiation, which is widely used, but also high-precision radiation therapy such as stereotactic radiation therapy and intensity-modulated radiation therapy (IMRT) are actively performed. Also, brachytherapy has been applied to the patients with prostate cancer, gynecological cancer and tongue cancer.

Features

Treatments of radiation therapy have been decided based on the consensus of our expert staffs including radiation oncologists and medical physicists, thereby suitable treatment can be achieved with irradiating to the tumor precisely and also effectively reducing irradiation to

normal tissues. We are now actively using intensity-modulated radiation therapy for many tumors. In stereotactic radiotherapy, we mainly use CyberKnife to treat brain metastases, head and neck malignant tumors, lung malignant tumors, liver malignant tumors, prostate cancer, spinal metastases, and oligometastases.

Concerning brachytherapy, treatment with 125 iodine seeds for prostate cancer (mainly low risk case) and treatments with high-dose-rate brachytherapy for gynecological cancer, prostate cancer and tongue cancer are available.

Considerations in referring your patients to Radiotherapy

As a general rule, please introduce the patient to the main department in charge of each disease (for example, gastroenterology for esophageal cancer).

Please introduce the treatment requests directly to our departments with an introduction letter with data including blood tests and the images of CT MRI and/or PET-CT for stereotactic radiotherapy using CyberKnife for brain metastases, head and neck malignancies, pulmonary malignancies, hepatic malignancies, spinal metastases, and oligo-metastases.

Nuclear Medicine

Specialized medical services

In Nuclear Medicine, we are in charge of diagnostic nuclear medicine and treatment using radiopharmaceuticals. Diagnostic nuclear medicine is a method of evaluating a patient's condition by administering a radiopharmaceutical and externally measuring the in-vivo kinetics over time. Currently, we are using three PET-CT scanners, two SPECT-CT scanners and two SPECT scanners. Diagnostic nuclear medicine is used for a broad range of disorders, including the heart, brain, malignant tumors, respiratory organs, digestive organs, kidneys and urinary tract, endocrine disorders, and bone joints. In particular, it can make the diagnosis of conditions or functions which cannot be detected by conventional morphological imaging modalities. In recent years, the range of diseases for nuclear medicine therapy is expanding. Currently, we can provide 90Y-labeled antibody therapy for CD20-positive recurrent low-grade B cell non-Hodgkin lymphoma, and radium chloride (Ra-223) treatment for castration-resistant prostate cancer with bone metastasis.

Features

Osaka University Hospital has a compact cyclotron for medical use, which synthesizes radiopharmaceuticals for PET examinations. Cancer cells consume abundant glucose to proliferate. For this reason, F-18 fluoro-deoxy-glucose (FDG), a radioactive glucose analogue, accumulates very highly in malignant tumors. These sites with abnormal accumulation can be evaluated with PET, enabling early diagnosis of cancer, evaluation of therapeutic effect, and detection of the recurrence. Our department currently conducts over 2,200 FDG-PET examinations annually for all malignant tumors other than early stomach cancer. Recently,

FDG-PET can be used for evaluating the activity of large vasculitis, such as Takayasu's arteritis. We also perform quantitative assessment of cerebral blood flow, cerebral oxygen consumption and cerebral oxygen extraction fraction using O-15 gas PET, and quantitative myocardial blood flow measurement using ammonia PET as examinations under health insurance. We are also working to develop new radiopharmaceuticals and performing clinical research. The distribution of the drugs can be evaluated in individual patients, contributing to diagnosis and therapeutic prognosis.

Considerations in referring your patients to Nuclear Medicine

General nuclear medicine examinations and PET examinations are performed at the request of the attending physician of each department, and direct referrals to nuclear medicine departments are not accepted. For referrals of patients for nuclear medicine examinations, please contact each medical department. For nuclear medicine treatment outpatients (in the Oncology Center), a reservation is available through the referring doctor of the main department. Please consult the main department of each disease.

Department of Acute Medicine and Intensive Care Medicine

Intensive Care Medicine

Specialized medical services

The Department of Intensive Care Medicine is responsible for the management of critically ill medical and surgical patients who are admitted to the Intensive Care Unit (ICU). We have a comprehensive approach to clinical care, which often includes complex organ supports such as mechanical ventilation, vasoactive infusions, mechanical circulatory supports and treatments such as dialysis. All care is under the supervision of specially trained critical care doctors who provide a continuous medical presence 24 hours a day, seven days a week. Intensive Care requires the expertise of well-trained nursing and allied health personnel as well as support from technicians and bioengineers to ensure all therapeutic devices are well-maintained. Intensive Care Specialists (also known and "Intensivists") play the central role and coordinate the care by collaborating with clinicians from other specialties across the hospital who also contribute their unique skills and expertise to patients in ICU.

Features

Our Intensive Care Department was one of the first to be established in Japan, commencing in 1974 following Tohoku University and is accredited as a specialist training facility by the Japanese Society of Intensive Care Medicine (JSICM). We embrace our responsibility to train the next generation of critical care clinicians and to advance patient care through research.

Over the last fifty years, our ICU has grown to 29 beds, with 1355 patients admitted in 2022. The majority of our ICU patients are adults admitted for post-operative care following major cardiovascular or gastrointestinal surgery, however we also regularly care for medical patients

with conditions such as sepsis and respiratory failure. Additionally, we have considerable experience and expertise in the management of critically ill children and support pediatric patients with liver failure and congenital heart disease requiring transplantation, ventricular assist devices, and other complex interventions.

Emergency and Critical Care Medicine

Specialized medical services

The Trauma and Acute Critical Care Center was designated a tertiary emergency medical facility for serious acute conditions in 2001.

We accept only severe cases transported directly from the scene by an emergency response team or those referred from another medical facility, treating 900 to 950 inpatients a year. The center is equipped with the most advanced intensive care capabilities, including a dedicated emergency room, a two-tube high-speed helical CT scanner, an angiography room with Xper CT capability, an emergency laboratory, a percutaneous cardiopulmonary support device, an aortic balloon pump, continuous hemodiafiltration apparatus, ultrasonotomography, floating bed for burns, and a patient monitoring system with electronic fever type tables.

According to the recent hospitalization statistics, approximately 40 percent of the cases were of external causes such as trauma, poisoning and burns, while approximately 60 percent were of internal cause such as disease or obstetrics emergency. Staff of the hospital's Stroke Center, Heart Center, Center for Maternal, Fetal and Neonatal Medicine work with the staff of the Trauma and Acute Critical Care Center to provide effective team medical care, accepting and treating severe central neurological emergencies (16% of annual admitted cases), circulatory emergencies (18%), pediatric cases under age 15 (6%) and obstetrics emergencies (1%).

Features

The history of our facility, which was established in 1967 as the first full-fledged dedicated severe emergency center in Japan, was presented by NHK on the program Project X. Throughout our history we have consistently aimed to build an emergency medical program which develops pioneering diagnostic and treatment techniques.

We have operated a helicopter ambulance at the commission of Osaka Prefecture since 2008. By mobilizing the helicopter ambulance from the heliport atop the hospital, a specialized emergency physician and registered nurses are quickly dispatched to the scene to provide emergency care, and rapid transport to specialized medical facilities is possible. It also plays a central role in large scale disasters and engages in widespread disaster care not only in the Kinki region, but also in the Chugoku, Shikoku, Tokai and Hokuriku districts

Specialist Clinic

Nursing Specialist Clinic

Specialized medical services

The Nursing Specialist Clinic was established to provide highly professional nursing by the Department of Nursing, with the Diabetes Care and Nursing Clinic in 2004, the Skin Care Clinic in 2011, and the Respiratory Care and Nursing Clinic in 2019. Certified diabetes educators and certified nurses provide advanced nursing techniques in collaboration with each clinical section.

Diabetes Care and Nursing Clinic

Features

The Diabetes Care and Nursing Clinic provides foot care for diabetes patients with the guidance and cooperation of physicians of Metabolic Medicine, works to prevent the development and recurrence of diabetic foot lesions (foot ulcers, foot gangrene) and promotes the self-care of feet. At the same time, we provide guidance on diabetes treatment including insulin therapy and exercise regimen, as well as self-care support and consultation on individual patients' lifestyles. From September of 2012, reaffirming the importance of self-care by diabetes patients based on dietary regimen, we assembled a team of physicians of Metabolic Medicine, managerial dieticians and certified diabetes educators to halt the progress of diabetic kidney disease, which is one of the complications of diabetes, and have begun guidance on preventing diabetic dialysis. In addition to diabetic foot care and self-care support, we have established a Diabetic Complications Clinic and Diabetes Metabolic Station Clinic, where we perform many tests for diabetic vascular complications in cooperation with physicians of Metabolic Medicine, and strive both for early detection of diabetic complications and to prevent their progression.

Skin Care Clinic

Features

The Skin Care Clinic provides care for patients who have undergone stoma construction surgery, including children. Involved from even before surgery, we offer care in cooperation with ward nurses during hospitalization. So that patients living with a stoma can lead a better social life, after discharge from hospital we continue observation for early detection of stoma complications, select appropriate equipment, provide information on techniques of equipment and care, and provide psychological support.

Respiratory Care and Nursing Clinic

Features

The Respiratory Care and Nursing Clinic provides patients who require respiratory therapy at home with medical support and consultation services tailored to their individual needs, and helps improve QOL after discharge.

In cooperation with the attending physician, we introduce and change the equipment for respiratory therapy, and evaluate and adjust the oxygen flow rate used. We also share in the patient's physical, emotional and social problems, conducting advanced care planning (ACP) to

consider both the present and future, as well as provide support in deciding where and how to recuperate, so patients can live their own lives.

Lymphedema Nursing Clinic

Features

Lymphedema is swelling of the arms and legs that occurs when the flow of lymph is blocked, and it is important that patients continually provide care in their daily lives. The Lymphedema Nursing Clinic provides instruction, including on compression therapy using elastic clothes (sleeves, stockings, etc.), self-massage, and skin care, and supports patients so that they can give themselves more effective care according to their lifestyle, age, and physical fitness.

* Currently, the Lymphedema Nursing Clinic is conducted at the patient's own expense outside insurance.

Central Medical Treatment Section

Rehabilitation

Facility criteria

This hospital, as an insurance medical institution that meets the following facility standards, has reported to and been accepted by the director of the Kinki Regional Bureau of Health and Welfare.

Heart and large blood vessel rehabilitation(I)

Cerebrovascular accident rehabilitation(I)

Disuse syndrome rehabilitation(I)

Orthopedic rehabilitation(I)

Respiratory rehabilitation(I)

Cancer rehabilitation

Specialized medical services and staff

Director of Rehabilitation, deputy director of Rehabilitation, 1 assistant professor, 3 medical staff 19 physical therapists, 4 occupational therapists, 3 speech pathologists

Physiatrist:

The physiatrist examines patients with locomotor or communication disorders caused by various diseases at the request of each section (all clinical sections), and prescribes rehabilitation if it is judged that physical, occupational or speech rehabilitation is indicated. It is a rotating schedule Monday through Friday, with first visits and re-examinations in the morning and re-examinations in the afternoon.

Physical therapy (PT):

Treatment and training are conducted using physical therapy, exercise therapy and basic motion training, mainly in order to restore basic abilities of action (turning over, sitting, standing, walking, etc.) for motor dysfunctions (muscle strength, range of joint motion, coordination, cardiopulmonary and other dysfunctions). Motion analyzers, cardiorespiratory analyzers and other equipment necessary to evaluate motor function are used to obtain a more objective assessment.

Occupational therapy:(OT)

Problems with applied movement abilities (eating, grooming, dressing, toileting, bathing, housework, writing, etc.) due to physical or higher brain function disability are evaluated, and therapy and training are conducted for recovery. Facilities are installed to evaluate movement disabilities, including toilet and bathing equipment and a Japanese style room. In response to an aging society, guidance for families on methods of assistance and utilizing welfare devices is provided.

Speech-language-hearing therapy (ST):

Communication disorders such as aphasia, motor speech disorders and higher brain dysfunction are evaluated, and therapy, training and guidance are provided. Rehabilitation is also conducted for dysphagia that occurs at the same time as communication disorders, in cooperation with doctors and nurses. Specific guidance for families and caregivers on how to respond to communication disorders and/or dysphagia is provided as needed.

Department of General Medicine / General Medicine

Specialized medical services

We accept outpatients who visit the Osaka University Hospital for the first time with no referral letter and do not know the clinical section in which they should be examined, and outpatients with a referral letter to General Medicine. We refer the patients to the appropriate specialty section when determining that they need to be examined in the specialty section as the result of consultation. The outpatients who have no referral letter and those who have a referral letter but do not know the appropriate specialty section are handled at the reception counter. We do not in principle provide continuous medical services or hospitalization. The patients who are determined to need continuous treatment or hospitalization are referred to the appropriate specialty section in our hospital or in another hospital.

Features

About 100 new patients visit General Medicine every month, amounting to 400 to 500 patients per month including revisitors. Each day 20 to 30 new patients and revisitors visit General Medicine to consult about the appropriate specialty section. The person in charge at the reception counter listens to complaints of patients and refers them to the appropriate specialty

sections if necessary. Other patients, for whom appropriate organ-specific clinical section cannot be determined, have an examination in General Medicine.

Considerations in referring your patients to General Medicine

If an appropriate specialty section cannot be determined for a patient even having a referral letter (for example, due to ambiguous destination of the referral letter), the referral letter is opened by the person in charge at the reception counter. Then, after listening to the patient and/or performing an examination in General Medicine, we determine the specialty section appropriate for the patient. To reduce the patient's waiting time, it is strongly recommended that you write clearly the destination of the referral letter (the doctor in the specialty section such as Gastroenterology and Hepatology or Cardiovascular Medicine).

In the case of symptoms which you are difficult to classify into the appropriate organ-specific clinical section, or those for which it is difficult to determine the appropriate specialty section, please refer the patients to General Medicine.

Blood Purification Center

Specialized medical services

The medical services provided here are hemodialysis induction for patients with renal failure, and hemodialysis therapy for maintenance hemodialysis patients who admitted to our hospital for the purpose of surgery etc. We also provide peritoneal dialysis (CAPD) as a renal replacement therapy. Due to the limited number of beds, outpatient hemodialysis is not performed in principle. The center also supports special treatments, including plasma exchange and double filtration plasmapheresis therapies for liver failure, autoimmune disease, and blood type incompatible organ transplantation, leukocyte removal therapy for inflammatory bowel disease, and LDL apheresis therapy for familial hyperlipidemia and intractable nephrotic syndrome.

When considering the hospitalization of patients who require blood purification therapy, please consult department of Nephrology in advance.

Department of Genetic Counseling

Specialized medical services

We provide medical care services mainly at the genetic counseling clinic to give advice to clients with a wide variety of genetic diseases from congenital disorders due to chromosomal or genetic changes to multifactorial disorders such as life-style related diseases. A team of interdisciplinary medical staff, including medical geneticists and certified genetic counselors, provides basic counseling services and gives psychological and social advice to address genetic

medicine-related problems. We hold a case conference every month to discuss the genetic counseling approach and the latest problems with genetic diseases. We also give seminars to promote familiarization with medical genetics and training courses for medical geneticists.

Features

Genetic counseling is conducted in the presence of a medical geneticist and a certified genetic counselor using prepared explanation materials in a separate interview room. Specialized doctors from 26 specialty sections work together with our staff, establishing a solid medical-service system that can address a wide variety of genetic diseases. We recognize which genetic examinations and biochemical examinations can be handled by which specialty sections, allowing various genetic diseases that need genetic counseling to be diagnosed in our hospital.

Considerations in referring your clients to the Department of Genetic Counseling

General genetic counseling

We provide genetic counseling for a variety of genetic disorders, including congenital metabolic disorders, neuromuscular disorders, hereditary tumors, hearing loss and familial Parkinson's disease. In the flow of treatment, pre-counseling is first performed by a certified genetic counselor, asking for the purpose and hope of the consultation, and then genetic counseling is conducted with the addition of clinical genetic specialists. Depending on the content of the consultation and the need, other experts such as medical specialists related to these diseases, clinical psychologists, or social workers may also participate with prior approval. Finally, at post-counseling we seek the client's thoughts after genetic counseling, and schedule another appointment if necessary.

Prenatal genetic counseling

Genetic counseling on prenatal testing such as amniotic fluid tests and non-invasive prenatal genetic tests (NIPT) is conducted. In any case, examination at Obstetrics & Gynecology is required prior to counseling.

In addition to the doctor, a clinical psychologist (YOSHIZU Kikuko) and certified genetic counselor (SATO Yuki/NISHIO Hitomi) are also present.

Fee for genetic counseling (not covered by insurance)

Genetic Counseling (by appointment only)

*The fee may be partially covered by insurance. Note that the fees for examinations by doctors in other clinical sections and clincal tests are charged separately.

XIn some cases, revisiting clients need to pay the first visit fee if they discontinued visiting or depending on the nature of counseling.

Genetic support (We will respond as soon as your message is received.)

"Genetic support" has been newly established in order to respond broadly to various consultations on genetics. For those may wish to consult about genetics but do not know exactly what genetic counseling is, this support has been set up as a step toward genetic counseling. Anyone who thinks that they might like to talk to a genetic counselor or clinical psychologist about genetics or genetic counseling can feel free to use this service. For details including appointments, please contact the Department of Genetic Counseling.

Facility name: Department of Genetic Counseling

Call for an appointment: 06-6879-6558 (9:00 am to 17:00 pm, Monday to Friday)

Department of Genetic Counseling, Outpatient Clinic Building L Floor

Counseling Rooms 1 & 2, Oncology Center Building 4th Floor

Chemotherapy

specialized medical services

The chemotherapy rooms on the 2nd and 3rd floors of the Oncology Center are designed to allow cancer patients who are receiving medical treatment at our hospital to undergo anticancer drug treatment or antibody treatment safely and comfortably on an outpatient basis in specialized treatment rooms. Many patients have been treated since it was established in December 2003. Today, one in two people will develop cancer, and chemotherapy is going to be used in the treatment of many of these cancers. Due to the adoption of new anticancer drugs and more effective countermeasures against side effects, cancer patients are now able to stay at home during treatment. At the chemotherapy clinic, we not only have the space to provide patients with safe and comfortable treatment, but also various medical personnel cooperate to support patients' home care.

Features

The Oncology Center building was opened in September of 2015, and the chemotherapy rooms on the 2nd and 3rd floors are furnished with 42 reclining chairs and beds. Our facility is capable of treating up to 70 patients in a single day. Especially, by providing more beds to respond to patient's comfort, outpatients can receive treatment in the same environment as hospitalization.

While the patient safely receives the infusion, doctors, nurses and pharmacists with abundant specialized knowledge cooperate in wide-ranging consultations on side effects and social resources. If more specialized consultation is necessary, we also actively collaborate with full-time medical social workers and clinical practitioners.

In the pediatric treatment room, we treat nearly 50 child patients annually. We have secured a semi-private room for a single family so that children can receive chemotherapy while enjoying TV and DVDs with their parents or playing games.

There is a blood sampling room on the first floor of the Oncology Center. This blood sampling room was established to minimize the waiting time of patients receiving chemotherapy. Therefore, patients receiving chemotherapy treatment on the day are prioritized for blood collection. In addition, since the nurse who performs blood collection is also working the treatment room, blood sampling is done from a safe part where the drug will not leak from the blood vessel.

Considerations in referring your patients to Chemotherapy

Currently, the chemotherapy clinic is conducting cancer chemotherapy for almost all clinical sections. The reservation system is used, in a two-part system with the outpatient physician taking reservations in the morning or afternoon. The patient should come to the chemotherapy room to receive treatment after a doctor's examination in the consultation room on the first floor of the Oncology Center, or the clinical section in charge. We do not accept reservations by phone from patients, so please contact the appropriate clinical section.

Center for Maternal, Fetal and Neonatal Medicine

Specialized medical services

The birth of a new life creates great joy and excitement. However, if there is some problem with the mother or the baby inside her, groups with expert knowledge and skills must respond promptly through close team medical care, while applying their respective characteristics. The Center is focused on Obstetrics and Pediatrics (the Neonatal Group), and has built a close network of various specialized medical departments, including the Center for Fetal Diagnosis and Treatment, Trauma and Acute Critical Care Center, Pediatric Surgery, Cardiovascular Surgery, Neurosurgery, Department of Genetic Counseling and Anesthesiology, to protect the lives of both mother and child.

Unnecessary medical intervention is avoided if the mother and child are in good condition, but if there is a risk which threatens a healthy future, the concerted efforts of the Center are applied to its diagnosis and treatment. At the same time, we actively strive for safe, painless childbirth, and hope that the Center will be used not just for high risk and complicated pregnancies, but by all pregnant women in general.

Features

We are one of six general perinatal medical centers in Osaka Prefecture.

As a major feature of a university hospital, a full array of internal medicine and surgical departments are available, and by always working in close cooperation, we can provide highly specialized medical treatment. We also accept cases of high risk pregnancy widely and proactively using our 24-hour maternal transport system (OGCS: Obstetric & Gynecologic Cooperative System).

As one of seven medical institutes in Osaka which accept the most severe maternity complications, we actively work to improve the situation of the mother's life in collaboration with the Trauma and Acute Critical Care Center.

The Center for Fetal Diagnosis and Treatment was opened in 2015. This enables early diagnosis, advanced specialized medical treatment, and state-of-the-art treatment of fetal diseases diagnosed before birth.

We are actively working toward childbirth free from labor pains. Painless labor has less pain, and has the advantage of being able to calmly give birth, but it is generally necessary to plan the birth date in advance, and there are cases where induced labor is carried out. Our hospital is of the few that can handle painless labor on a 24-hour basis (2016/12/25 Nikkei Shimbun) by an obstetrics anesthesia team with anesthesiologists, and we can flexibly deal with a choice of delivery methods.

After birth, in addition to advanced intensive care management in an NICU, we can provide advanced medical care in specialized fields of pediatrics (cardiovascular, nerve, endocrine, kidney, blood, etc.) through collaboration with the Center for Pediatric Diseases. We also provide careful follow-up after discharge together with the Department of Genetic Counseling and the Center for Developmental Medicine and Child Psychiatry, we watch over children's healthy growth and development.

Considerations in referring your patients to the Center for Maternal, Fetal and Neonatal Medicine

Pregnancies

Cases of pregnancy are basically accepted every day. Please arrive at the reception by 11:00 a.m. with a letter of introduction. In particular, if you would like introduction to a specialist clinic, it is best to refer to the table of outpatient services. Specialist clinics have a group practice system. Please note that due to the special nature of a university hospital, replacement of doctors may occur. Please refer complicated pregnancies on Wednesdays and Thursdays, high-risk obstetric cases (such as placenta previa, placenta accreta, giant myoma) on Wednesdays, and cases of fetal diseases and prenatal diagnosis on Tuesdays and Fridays.

Neonatal cases

Outpatient follow-up of newborns after discharge is done on Tuesdays and Fridays by Neonatal Follow-Up Clinic. Please consult the table of outpatient services when making referrals.

Trauma and Acute Critical Care Center

Specialized medical services

The Trauma and Acute Critical Care Center was designated a tertiary emergency medical facility for serious acute conditions in 2001.

We accept only severe cases transported directly from the scene by an emergency response team or those referred from another medical facility, treating 900 to 950 inpatients a year. The center is equipped with the most advanced intensive care capabilities, including a dedicated emergency room, a two-tube high-speed helical CT scanner, an angiography room with Xper CT capability, an emergency laboratory, a percutaneous cardiopulmonary support device, an aortic balloon pump, continuous hemodiafiltration apparatus, ultrasonotomography, floating bed for burns, and a patient monitoring system with electronic fever type tables.

According to the recent hospitalization statistics, approximately 40 percent of the cases were of external causes such as trauma, poisoning and burns, while approximately 60 percent were of internal cause such as disease or obstetrics emergency. Staff of the hospital's Stroke Center, Heart Center, Center for Maternal, Fetal and Neonatal Medicine work with the staff of the Trauma and Acute Critical Care Center to provide effective team medical care, accepting and treating severe central neurological emergencies (16% of annual admitted cases), circulatory emergencies (18%), pediatric cases under age 15 (6%) and obstetrics emergencies (1%).

Features

The history of our facility, which was established in 1967 as the first full-fledged dedicated severe emergency center in Japan, was presented by NHK on the program Project X. Throughout our history we have consistently aimed to build an emergency medical program which develops pioneering diagnostic and treatment techniques.

We have operated a helicopter ambulance at the commission of Osaka Prefecture since 2008. By mobilizing the helicopter ambulance from the heliport atop the hospital, a specialized emergency physician and registered nurses are quickly dispatched to the scene to provide emergency care, and rapid transport to specialized medical facilities is possible. It also plays a central role in large scale disasters and engages in widespread disaster care not only in the Kinki region, but also in the Chugoku, Shikoku, Tokai and Hokuriku districts.

Others

Specialized medical services

Previously, the Unit of Dentistry operated on a daily rotation system whereby a dentist from the Osaka University Dental Hospital would be on duty to take charge of hospitalized patient's dental treatment. However, believing that a full-time dentist was required for ongoing treatment, one dentist (assistant professor) became in charge from April 2011.

Also, from April 2018 the number of dentists has increased, and two dentists consult.

The purpose of this unit is to provide patients who are hospitalized at the Osaka University Hospital with dental support to allow focus on treatment of the primary disease.

Specific services include:

General dental treatment (However, because prosheses that require a technician, such as dentures and bridges, can cause confusion due to descharge before completion and fitting, they

are restricted to long-term hospitalized patients and other patients who so desire are referred to the dental hospital.)

Oral care during chemotherapy and radiation therapy

Perioperative oral care for surgery on malignant tumors in the head and neck area, respiratory organs or digestive organs, organ transplant surgery or cardiovascular surgery, etc.

Ancillary care in cases where oral care in the ward is difficult

Evaluation of the presence of a dental source of infection and its removal in patients scheduled for immunosuppression and use of bisphosphonate agents

Features

Because the full-time dentist has experience as an oral surgery specialist at the Osaka University Dental Hospital, surgical treatment for patients systemically at risk that could not be done by a general dental practitioner (tooth extraction, cyst removal, etc.) can be performed with the attending physician's permission. Even if taking warfarin, teeth can be extracted with firm local hemostasis if PT-INR is 2.5 or less (2.0 for impacted tooth extraction).

We also aim for early rehabilitation of patients at Otorhinolaryngology-Head and Neck Surgery with oral cancer by cooperating with the Department of Removable Prosthodontics, Osaka University Dental Hospital before surgery to provide braces or jaw dentures soon after surgery according to the case.

Considerations in referring your patients to Unit of Dentistry

Treatment at this unit is limited to patients who are hospitalized at the Osaka University Hospital. Other patients should visit the <u>Osaka University Dental Hospital</u>. Hospitalized patients who wish to be examined at the Unit of Dentistry should always get a referral from their attending physician.

Collaborative Medical Treatment Section

Swallowing Center

Specialized medical services

It is known that the ability to eat and swallow gradually deteriorates with age, even in healthy individuals. It is common for patients with illnesses, especially those with cancer, stroke, cardiovascular disease, and post-operative patients after various major surgeries, to experience further deterioration of their swallowing functions due to the loss of strength caused by their illnesses, and to have to delay or change their treatment plans for their original illnesses due to weight loss or aspiration pneumonia.

In order to cope with such problems in the swallowing function, i.e., dysphagia, it is necessary to provide diagnosis, evaluation, guidance, and rehabilitation for patients in collaboration with

many different professions. With the opening of the center, we expect that seamless medical treatment will be realized, enabling us to provide higher quality swallowing treatment than before, as well as to improve the treatment outcome of the original disease.

Features

Swallowing Center provides examination, training, and advice on eating and swallowing, mainly for hospitalized patients. A multidisciplinary team of physicians, dentists, speech-language pathologists, and nurses are involved in the swallowing clinic.

First of all, it is essential to evaluate the patient's swallowing function, so please request a consultation at the Otorhinolaryngology-Head and Neck Surgery Outpatient Clinic. After evaluation by endoscopic swallowing study, we will provide advice and training for each patient and request rehabilitation to the Department of Rehabilitation Medicine if necessary. Patient information will be shared among many professions at the swallowing conference and appropriate policies will be proposed.

For outpatient care, patients who wish to undergo surgery to improve swallowing function or prevent aspiration, or patients who are suspected to have worsened feeding and swallowing function due to their primary disease during treatment at our hospital, should first be referred to the Otorhinolaryngology-Head and Neck Surgery Outpatient Department.

Considerations in referring your patients to Swallowing Center

Inpatients: available Monday-Friday weekdays. Requests should be made via inpatient referral in the Otolaryngology Outpatient Department. Patients in poor general condition may not be evaluated (e.g., level of consciousness JCS=3 or higher, oxygen requirement 6L or higher, temperature 38°C or higher). In such cases, please refer the patient again after his/her condition improves.

Outpatients: Please make an appointment with Dr. Hosokawa (Monday and Wednesday) and Dr. Nozawa (Tuesday) via the Patient Comprehensive Support Center when making a referral. Please note that we do not accept follow-ups for patients with feeding and swallowing disorders who are being treated at other hospitals. In addition, we do not provide outpatient rehabilitation services.

Intestinal Care & Rehabilitation Center

Specialized medical services

We support the treatment and recuperation of patients with intestinal dysfunction in multiple disciplines, providing comprehensive and specialized medical treatment. The conditions are gastrointestinal diseases, such as short bowel disease, intestinal motility dysfunction, and intractable diarrhea, which require parenteral nutrition because the intestine alone cannot maintain nutrition.

Treated diseases

Short bowel disease

A condition in which a large amount of small intestine has been resected or the intestine is congenitally short, so that it is not possible to absorb sufficient nutrients and water from the intestine. Many patients with diarrhea, weight loss, dehydration or malnutrition are dependent on total parenteral nutrition.

Intestinal motility dysfunction

A refractory disease that causes symptoms of intestinal obstruction, such as abdominal distension, nausea/vomiting, abdominal pain, and bowel dilation, despite the absence of anatomical intestinal obstruction. There is still no standard treatment, and total parenteral nutrition is relied on, because dietary intake is inadequate due to dehydration from diarrhea or ileus/abdominal pain from abdominal distension. Since the condition of each patient is different, surgical treatment or intestinal rehabilitation is needed according to the individual's condition.

Intractable diarrhea

Even though the anatomical morphology of the intestinal tract is normal, nutrients cannot be absorbed because of marked watery diarrhea due to functional abnormality of the intestinal mucosa. Many patients with diarrhea, weight loss, dehydration or malnutrition depend on long-term total parenteral nutrition.

Others

Consultation is also available for patients who have disabilities because of diseases that are not directly related to the gastrointestinal tract, for whom ingestion is not possible, or who require a colostomy due to difficulty in defecation management.

Features

This hospital has been a pioneer in Japan in spreading total parenteral nutrition and the activities of the nutrition support team (NST). Previously, treatment of intestinal dysfunction was often done by individual doctors and clinical sections. By providing comprehensive and specialized medical care as a collaborative department, we aim to maintain/restore intestinal function, avoid complications, and improve QOL in home care. Since this hospital also performs small intestine and liver transplantations, we provide consultation on acute phase treatment of intestinal insufficiency, chronic nutrition management, and treatment of patients with intestinal dysfunction, from home care to medical transplantation.

Patients are supported by the individual expertise of pediatric gastroenterologists, pediatric surgeons, transplant surgeons, adult gastroenterologists, adult gastroenterology surgeons, nurses, pharmacists, registered dietitians, WOC nurses, speech therapists, physical therapists, dental hygienists, and medical social workers.

Considerations in referring your patients to the Intestinal Care & Rehabilitation Center

Doctors who have any problems in treating intestinal dysfunction should feel free contact us. Appointments can be made through the Patient Support Center of this hospital (Telephone: 06-6879-5080, Fax: 06-6879-5081).

Diabetes Center

Specialized medical services

The ultimate goal of diabetes treatment is to maintain the same quality of life (QOL) in diabetes patients as in healthy people and ensure the same lifespan as healthy people. To that end, it is extremely important to prevent the development and progression of microvascular complications (retinopathy, nephropathy, neuropathy) peculiar to diabetes and arteriosclerotic diseases (coronary artery disease, cerebrovascular disease, peripheral arterial disease).

Since diabetes mostly progresses asymptomatically, there are some patients who cannot be proactive toward treatment, and by the time they have noticed it, complications have developed that are irreversible. Diabetes is a disease deeply involved in everyday life, but the entire body is adversely affected while the patient is unaware.

In Japan, diabetes (type 2 diabetes) and those likely to develop it are steadily increasing with changes in lifestyle such as disordered eating habits and decrease in amount of physical activity. Therefore, diet therapy is a major premise in the treatment of diabetes. However, providing a healthy diet every day is no easy matter. In addition, moderate exercise habits need to be incorporated into diabetes care.

In this way, everyday life is deeply involved in diabetes treatment, and it is extremely difficult for a diabetes specialist to provide adequate care alone. At the Diabetes Center, diabetes care is supported mainly by managerial dietitians and nurses who are Certified Diabetes Educators of Japan.

Features

In addition to the departments of Metabolic Medicine, Geriatrics and Hypertension, and Pediatrics, the Division of Nutritional Management and Diabetic Care & Outpatient Nursing cooperate to provide meticulous diabetes treatment.

In the Diabetes Treatment Guideline (edited by the Japan Diabetes Society), childhood diabetes and geriatric diabetes are treated as separate items as diabetes of each life stage, and the treatment management goals and nutritional guidance are partly different from those for normal adults. Therefore, the three departments of Pediatrics, Metabolic Medicine, and Geriatrics and Hypertension have established the Diabetes Center as a platform for the preventive treatment of diabetic complications according to life stage. The Diabetes Center's approach in anticipating life stages is unprecedented in Japan and abroad.

In recent years, new drugs for treating diabetes have been marketed one after another, and medical devices related to the treatment of diabetes are constantly being developed. Ingenious

insulin pumps and subcutaneous continuous glucose meters will be introduced to medical treatment in the future. The Diabetes Center has established a system which can respond flexibly to such new devices.

Considerations in referring your patients to the Diabetes Center

For consultation, please contact Osaka University Hospital's Patient Support Center with a letter of referral from the patient's current medical facility or clinic for an appointment. For more information, please contact the outpatient clinic of one of the departments in charge (Metabolic Medicine, Geriatrics and Hypertension, Pediatrics).