



Advanced Technologies

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Welcome to **Medical Excellence**

Medical Excellence JAPAN (MEJ) was established with the support of the Ministry of Economy, Trade and Industry to promote the internationalization of superior Japanese-style medical services through public-private efforts in line with the philosophy of mutually beneficial international medical cooperation. From 2011, MEJ began support of foreign patients in receiving advanced medical treatments in Japan. Since April 2013, the MEJ expanded its scope to place priority on promoting the export of medical services, medical devices and systems as an integrated package of high excellence to foreign countries as all-Japan initiatives.

Visit us at www.medical-excellence-japan.org

Japan's healthcare excellence

The three unique qualities that make Japan's healthcare an excellent choice are: QUALITY CARE treatment with top-skilled healthcare professionals and practical expertise, ADVANCED TECHNOLOGIES using state-of-the-art medical devices, and JAPANESE HOSPITALITY for authentic compassion and personal attention.

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Quality Care

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What is an autologous cell sheet?

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ell sheet is a sheet-shaped culture of cells ted from a patient and grown in special lls are grown into a sheet-like shape on a equipment is used, the sheet-like shape d, and regeneration of damaged tissues and noted by applying such a sheet. Layered sheets are prepared according to the size of the tissues and organs. Because this sheet is made of the patient's own cells, no rejection occurs, and research is in progress to apply it to other organs such as the cornea, cardiac muscle, esophagus, periodontal tissues, and cartilage.

Comments from patients who came from abroad to receive medical care in Japan

irse in charge changed shifts, the nurse came to see us e could gain peace of mind about our nursing care." rear-old boy; surgery for congenital blepharophimosis syndrome.) "When I had many questions in my home country, physicians" got offended and it sometimes interfered with my treatment. But Japanese physicians answered all of my questions, even the minor ones." (Male patient; surgery for placing dental implants.)"When receiving examinations in which I had to take off my clothes, the interpreter could translate in my language over a curtain, which was able to protect my privacy." (Female patient; breast radiotherapy.)

Comprehensive medical care

Japanese healthcare is characterized not only by cutting-edge medical equipment and procedures, but also by the superlative quality of comprehensive treatment through team medical care. In addition to specialists providing medical care in interdepartmental teams, other medical professionals such as nurses, pharmacists, and physical therapists work together as a team, driven by a strong sense of mission, and backed by a wealth of experience. The results are visible in the high rate of positive outcomes. In healthcare services, however, the most important ingredient of all is the "heart" that doctors, other medical professionals, and administrative personnel put into all their dealings with patients. Numerous patients from abroad have already given glowing evaluations of the positive attitude with which service is provided in Japan. State-of-the-art treatment and warm hospitality are two indispensable elements of healthcare in Japan.

Regenerative medicine

nedicine is a collective term for medical d to restore functions lost by organs and ed impairment or dysfunction. In the field of the quality of intricate technical processes and can achieve the necessary cell culture also has a major part to play. A wide range of regenerative medicine technologies are currently being developed and clinical applications are being explored on a global scale, and in Japan in particular, clinical research on corneal transplantation and heart failure treatment employing autologous cell sheets is being conducted.

eparated when they are peeled off.



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What is an endoscope?

An endoscope is a medical device consisting of a thin, flexible tube with a lens at one end. Inserting an endoscope via the mouth or anus, or through a small opening in the abdomen, allows the organs to be directly observed from within. Surgical procedures or operations can also be performed during endoscopic observation. Endoscopic procedures have made it possible to perform surgery without the need to open the abdominal cavity, and thus greatly reduce the physical burden on the patient during and after the procedure. Japanese endoscope development technology is in the world's top class, and new advanced types of endoscopes, such as ultrathin and capsule endoscopes, have been put into practical use.

What is a particle beam?

Like X-rays and gamma rays (photon beams), a particle beam is one of the forms of radiation widely used for cancer treatment. A particle beam using the nuclei of hydrogen or carbon atoms does not release energy during its passage through the patient, and its strong effect is concentrated on the target. With this advantage, a particle beam is able to precisely target cancer tissues located deep in the body while limiting the effect on normal tissues. There are many facilities equipped with particle beams in Japan, and they have a wealth of experience in this field.

Less-invasive therapies

Today, the global trend in healthcare is toward less-invasive therapies that not only cure serious illnesses, but also minimize the impact on the patient's body, and make it possible to continue treatment with more effective therapies afterward. This trend has rapidly spread across a broad spectrum of fields in Japan as well, and much energy is being devoted to research and development of state-of-the-art technologies and equipment. The use of endoscopes to treat patients suffering from gastrointestinal disorders minimizes damage to the body, reduces postoperative pain, and speeds recovery. Another example is intravascular therapy employing catheters, which has led to improved results and dramatic lessening of impact on patients undergoing brain, heart, and peripheral artery procedures. Advanced robotic surgery has made it easier to perform less-invasive therapies with precision. Japan's elaborate image guided planning is ideally suited to achieving positive results in therapies such as these, which require procedures of the utmost precision. In the field of radiation therapy for cancer, new therapies such as particle beam therapy and advanced radiation therapy have fewer side effects and are more effective than conventional therapies. Japan is at the forefront of both development and implementation of these new therapies.



Other advanced procedures receiving international attention

In addition to the areas mentioned on the previous pages, other advanced procedures that are the focus of international attention are performed in Japan. Japan is recognized as being in the global top class in various surgical procedures, due to not only to advances in equipment, but also to the manual dexterity and professional dedication of Japanese surgeons, and their ingenious adjustments to operative procedures. Because in part to such adjustments in operative procedures, Japan boasts high

survival rates for gastroenterological cancer operations with lymphadenectomies, and doctors have been proactive in operating on even hard to- treat cases of head and neck cancer. In addition, Japan is renowned for having a wealth of experience and admirable success rates in the areas of bone marrow transplants for cancers of the blood and liver transplants for liver cancer. A wide variety of approaches to treating congenital abnormalities are taken as well.

What is lymphadenectomy (surgical removal of lymph nodes) during cancer surgery?

In one of the routes of metastasis, cancer cells metastasize to the lymph nodes through the lymphatic vessels and further spread to tumor and surrounding lymph nodes are removed at the same time, is thus thought to be effective in preventing the recurrence of cancer, and this is a standard surgical procedure for cancer performed in Japan. The five-year survival rate for Japanese patients with Stage 3 colon cancer who received surgery alone is about 75%, and this survival rate is reported to be about the same as that for American and European patients who received chemotherapy after surgery. Recently, chemotherapy after surgery is also being included in the standard treatment regimen for cancer in Japan, and the five-year survival rate is tending to improve.

Customized medicine

Customized medicine, tailored to the unique needs of each patient, is already prevalent in the fields of orthopedic surgery and plastic surgery. Procedures for osteoarthritis of the hip and knee are selected on a case-by-case basis, taking into account not only the patient's clinical condition but also lifestyle habits and religious affiliation. A characteristic of Japanese medicine is that any procedure chosen by the patient can be performed with a high degree of sophistication. Furthermore, technology for the manufacture and anchoring of safe aggregate materials and artificial joints tailored to the individual physique is becoming established as a system, and is now ready to Materials for be provided as an international service.

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artificial joints

Materials for artificial joints undergo constant development in Japan to realize long-term biocompatibility and high durability. For d durability, ultrahigh molecular weight polyethylene is used in the parts of artificial joints that rub against each other. Also, because the body's response to even small traces of wear debris can cause loosening of artificial joints, materials have been developed containing a small amount of vitamin E to reduce the toxicity of such wear debris. For metal portions, for long-term use with no fear of metal hypersensitivity, a cutting-edge alloy has been developed by adding zirconium, niobium, and tantalum, which are all elements that increase biocompatibility, to titanium, which is naturally compatible with bone. This material is now being used in clinical settings.

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Medical checkups, examinations, and dentistry and oral medicine

One factor contributing to the high quality of medical checkups and examinations in Japan is the development of superior diagnostic imaging and testing equipment harnessing the advanced technology that is the nation's forte. In the field of dentistry and oral medicine, top-quality, safe dental equipment and materials developed with cutting-edge technology contribute to Japan's extremely low rate of toothlessness. In broad terms, state-of-the-art medical equipment is essential to the high standard of Japan's medical checkups, examinations, and dentistry and oral medicine, but it is not the only factor. Other key elements include the presence of highly trained professionals such as health evaluation specialists who give precisely tailored advice based on the

> results of tests performed, clinical laboratory technicians who carry out precise maintenance of equipment, and nationally certified dental technicians. This Japanese hospitality extends to the medical field as well.

International comparison of the prevalence of toothlessness

In Japan, the proportion of edentulous (toothless) adults is 10% in the 65-74 age group, which is lower than other countries, suggesting that many people keep their own teeth healthy even at an old age. This is not only because of dentistry and oral medicine supported by cutting-edge technology and state-of-the-art equipment and materials. It is also a result of the therapeutic strategies adopted by many Japanese dentists, giving consideration to patients retaining their own teeth as much as possible



Total care for foreign patients in Japan

Comprehensive total service meeting all your support needs, from initial inquiries to follow-up examinations after you return home.



Expansion of Japanese medical services

International expansion of superior Japanese medical services package is implementing through public-private effort strategically. The Medical Excellence JAPAN is a hub of all-Japan initiatives in the private sector.



The Medical Excellence JAPAN website provides comprehensive information on healthcare in Japan.

www.medical-excellence-japan.org

Responses to inquires about healthcare in Japan

- Contact with medical institutions in Japan, and proxy service
- for procedures necessary to receive treatment

Arrangements for airport pickup and transport

- Medical interpretation and translation service
- Comprehensive support throughout your stay in Japan, and
- for those accompanying you as well

Support for post-treatment follow-up examinations

- Arrangement of escort and transport to airport
- Confirmation of treatment course and support for follow-up
- examination by Japanese medical institution