

Berlin-Zehlendorf

Japanese technique refined: Oesophagus removed and reconstructed with minimally invasive surgery



Prof. Marc H. Jansen

Surgical removal of the oesophagus is deemed to be one of the most complex of all surgical interventions. In recent years, the trend has been to carry out this surgery as a minimally invasive procedure.

Berlin-based Chief Consultant Professor Marc H. Jansen of the Clinic for General, Visceral and Minimally Invasive Surgery at the HELIOS Hospital Emil von Behring has focused on this aspect and developed his own technique following a period of observation in Tokyo.

This intervention involves the surgical treatment of malignant oesophageal carcinoma. Resection of the oesophagus (oesophagectomy) is one of the most complex types of visceral surgery. Technically, this minimally invasive surgery may be carried out on patients at any stage of tumour development.

“Thus far there has been no ‘gold standard’ for this newly developed surgical procedure. We have thus intensively

focused on current research and the latest technical options,” Professor Jansen explains the particular challenges facing the surgeon and his team. The minimally invasive surgical technique for oesophageal carcinoma is highly advanced in Japan, where specialised hospitals routinely offer this treatment. “An observation

visit to the leading centre, the National Cancer Centre East Hospital in Tokyo, provided us with an insight into the techniques used. Based on this, we have developed our own surgical concept in accordance with German surgical guidelines,” continues Jansen.

As is the case with the conventional surgical procedure, almost the complete oesophagus and the transitional part of the stomach are removed. During surgical resection, the lymph node stations along the routes of tumour metastasis are removed



This includes the lymph nodes on the oesophagus, at the fork of the main bronchi and the stomach. After removing the affected structures, the remaining stomach is used to form a pipe. This stomach pipe is connected to the upper excision margin of the oesophagus in the chest cavity.

The advantages of the minimally invasive procedure are enormous: “To date even we performed this kind of intervention routinely using the open conventional procedure, i.e. by an incision in both the abdominal area and the chest. Now, with this procedure, patients suffer significantly less blood loss, there is less strain on the immune system, there are fewer infections and the patients experience less pain. This means that patients recover more rapidly from the operation,” the experienced surgeon explains. Most patients with oesophageal carcinoma are pre-treated with

chemotherapy and possibly radiation as part of a modern, multi-modal treatment concept and prepared for surgery.

The hospital has been certified as a centre for minimally invasive surgery. Professor Jansen and his team already carry out most bowel operations using the minimally invasive technique and have a great deal of expertise to offer in this field. Oesophageal surgery remains one of the most complex interventions in visceral surgery, with a high risk of suture healing problems and respiratory organ complications. In order to reduce the rate of respiratory organ complications, patients

must be mobilised at an early stage, despite maximum physical stress due to surgery, and intensively treated with respiratory therapy. An experienced interdisciplinary team of doctors is essential for early detection and treatment of complications.

Berlin-Buch

○ Surgical treatment of obesity: Newly established obesity centre

Since 1st June 2016, Professor Jürgen Ordemann has headed the newly established Obesity and Metabolic Surgery Department at the Centre for General, Visceral and Oncological Surgery of the HELIOS Hospital Berlin-Buch. He specialises in obesity surgery, i.e. surgical methods aimed at weight reduction.

Obesity is a term used to refer to overweight which may be harmful to the person's health. No other disease is spreading as rapidly, both in Germany and in the rest of the world. The World Health Organisation (WHO) refers to a world-

wide obesity epidemic. Obesity results in diabetes (Type 2), cardiovascular disease, sleep-related respiratory disorders and tumours. In addition, obesity is quite often associated with depression and a restricted quality of life. The primary pillar of weight reduction is a change in the person's entire lifestyle. The diet must be changed and daily exercise should be increased. In the event of severe obesity, though, this type of therapy is often unsuccessful.

"In these cases surgical interventions such as the so-called gastric bypass or



Prof. Jürgen Ordemann

gastric sleeve surgery provide the possibility of significantly reducing the patient's weight in the long term," explains Professor Ordemann, who completed his special-

ised medical training at the Charité University Hospital in Berlin and established the Centre for Obesity and Metabolic Surgery there. This usually results in an improvement of secondary illnesses such as diabetes, hypertension and sleep apnoea syndrome. For this reason, obesity surgery is also referred to as "metabolic surgery". It enables chronically ill, obese patients to lead a healthier life of a higher quality.

HELIOS Heart Centre Niederrhein

○ Rhythm change in cardiac electrophysiology

With Associate Professor Dong-In Shin as its new senior consultant, the HELIOS Heart Centre Niederrhein has achieved yet another quality boost in high-end cardiac medicine, this time in the field of cardiac electrophysiology. Before making this change, the 42-year-old associate professor headed the Rhythmology Division at the Düsseldorf University Hospital.

Professor Shin, who was born in Hilden, is regarded as one of the leading specialists in heart rhythm disorders in Germany.

Under his guidance, a central care centre is being established at the HELIOS Hospital in Krefeld for patients within the region suffering from high-risk heart rhythm disorders who require treatment. For this purpose, the capacity of the arrhythmia outpatient department, where any patient can be presented to discuss interventional treatment options, is being



Associate Professor Dong-In Shin (right) joined the team of leading consultants at the HELIOS Heart Centre Niederrhein, consisting of Professor Heinrich Klues (centre right), Associate Professor Alexander Buße (centre left) and Professor Franz-Xaver Schmid (left).

expanded. The technical facilities of the cardiac catheter laboratory have also been extensively upgraded. "The dynamics of the local heart centre were unpredictable, even for us here in Düsseldorf. The combination of high-tech medicine offered by a maximum-care hospital and the consistent promotion of medical quality is hard to resist and I am proud to be permitted to be a member of this team," the new senior consultant explains his move to Krefeld.

For Shin, the fascination of cardiac rhythmology lies in its complexity. "A simple ECG is sufficient to identify the exact origin of many types of arrhythmia. At the same time the treatment of heart rhythm disorders requires many years of experience, great manual skill and the latest medical technology." The main task is to detect electrical signal patterns from all relevant parts of the heart and to interpret them in a meaningful way. Most heart rhythm disorders can now be im-

proved or even healed by means of targeted destruction of myocardial tissue, using hot or cold energy. For this purpose, electrical connections are often suppressed or diverted.

Dr. Shin, who has handled over 4,000 catheter ablations, is certified by the German Society for Cardiology (DGK) in the field of "Specialised Rhythmology" and has been accredited as a trainer for the acquisition of this specialised skill.

Wuppertal

○ New procedure: Rectal surgery without a major abdominal incision



Professor Hubert Zirngibl and Professor Gabriela Möslein jointly apply the new method at the Surgical Centre of the HELIOS University Hospital in Wuppertal.

This technique is newly established at the HELIOS University Hospital in Wuppertal, increases the chances of smooth functioning and more frequently results in the retention of the sphincter muscle. The aim is to ensure continued excellent quality of life.

Every year some 20,000 people in Germany develop rectal cancer, according to official estimates. Treatment is mainly based on healing the carcinoma, with surgeons playing a decisive role in this. However, many patients fear the option of an artificial bowel outlet. There is evidence, how-

ever, that surgery without a major abdominal incision (so-called "laparoscopic", "minimally invasive" surgery or the so-called button-hole technique) is just as effective - if not better - in healing this type of cancer, as the procedure is more gentle and easier on the immune system.

The newly established surgical method in Wuppertal, the so-called "trans-anal total mesorectal excision (taTME) makes

surgery even less invasive. During this procedure, the rectum is almost completely removed, but the nerve function and the natural bowel outlet can be significantly better retained. In the words of Professor Hubert Zirngibl, Director for General and Visceral Surgery and Professor Gabriela Möslein, Director of the Centre for Hereditary Tumour Diseases, "Together we have managed to operate very successfully on ten patients thus far".

"taTME is a procedure in which even the lowest section of the rectum close to the

sphincter muscle can be removed with minimal invasion. Thus access is via the natural body orifice, allowing a significantly better view of the nerves. This means that in many cases it is possible to retain the sphincter muscle, even when the tumour is located at a low level, as well as to preserve the nerves, thus resulting in a better quality of life." The previous standard procedure for treating rectal carcinoma was surgery with an abdominal incision, where the affected part of the bowel, the surrounding tissue and the adjoining lymph node were removed.

Depending on the position and size of the tumour, this may in certain cases still be the best alternative. "This new technique has only been used by a few hospitals to date," says Professor Zirngibl. As a hospital with a large bowel and pancreatic carcinoma centre, he is very keen to be able to offer patients in Wuppertal modern surgical techniques.

The newly established Centre for Hereditary Tumour Diseases headed by Professor Möslein mainly treats patients with a genetic predisposition to cancer. "For very young patients in particular, excellent functional maintenance serves as a basis for a healthy life of a high quality," maintains this very specialised surgeon. This also applies to patients with chronic inflammatory bowel diseases.

Hamburg

○ Treated like a top athlete

The trend is unbroken: the demand for highly specialised surgery in the field of sports orthopaedics is steadily growing. A new operating theatre for sports orthopaedics is now being opened at the HELIOS ENDO-Klinik, comprising some 880 m².

Following a construction period lasting less than a year, the new sports orthopaedics ward at the HELIOS ENDO-Klinik has been taken into operation. The new operating theatre combines high-tech medicine, medical expertise, short travel-



ling routes and good interdisciplinary communication for the benefit of patients. "The need for highly specialised surgery to treat joint and soft tissue injuries and their consequences is continuously in-

creasing and our new sports operating theatre meets all the requirements for high-quality sports-medical care," says Philip Wettengel, executive director of the HELIOS ENDO-Klinik. "This is a further

step towards ensuring our top position in high-performance medicine, as provided by the orthopaedic division of the ENDO-Klinik, in future.”

Experts from the Division for Sports Orthopaedics at the ENDO-Klinik are provided with three individual operating theatres in the new surgical ward, allowing them to treat outpatients as well as inpatients requiring arthroscopic, minimally invasive and conventional surgery. The aim is to preserve injured or damaged joints.

All four specialists – Dr. Werner Siekmann, Dr. Lutz Simon, Professor Andreas Werner and Dr. Matthias Strauss – cover the entire field of sports traumatology and their sequelae and focus on one or more specialised fields each. This specialisation ensures a continuously high level of service. All the specialists have many years of experience in diagnosing and



Dr. Werner Siekmann, Dr. Lutz Simon, Dr. Andreas Werner and Dr. Matthias Strauss

treating sports injuries, as some of them have been treating competitive and professional athletes for many years. Dr. Werner Siekmann was also the team doc-

tor and head of the medical team of the professional football section of the Hamburg Sports Club.

HELIOS Prevention Centre (HPC) ○ Preventative health care made easy

Restless sleep, job-related stress or an unhealthy lifestyle? Many people hardly find time to focus on their health. The one- to two-day health check-ups at the HELIOS Prevention Center (HPC) help to prevent diseases and HPC doctors provide advice on the way to healthy living.

The concept is a simple one: customised prevention programmes from a single source at 18 locations in Germany. The age-specific check-ups provide an accurate picture of the state of health and are personally tailored to each participant, his risk profile and his professional and personal situation. HELIOS experts examine major health parameters and physical performance functions, including a comprehensive blood test, ultrasound diagnostics of various organs and arteries and both resting and stress ECGs. In the event of risk constellations, preventative action and supplementary diagnostics are specified if required.

During each check-up at the HPC, the participants benefit from the high medical qualifications and many years of experience of the preventative experts, who remain their contact persons in the event

that continued medical care may be required. A comprehensive final interview takes place to discuss the medical results obtained and the patient’s personal lifestyle. The doctor and patient jointly develop a realistic individual action programme to boost health and ensure an all-round healthy lifestyle.

The incorporation of the HPC into Germany’s leading hospital network guarantees a uniform quality standard when it comes to medicine and expertise. All examinations can take place under a single roof – this means no waiting times, short travelling distances and personal all-round care provided by the HPC doctor and the local team.

At the HPCs, participants benefit from an age-specific, individually tailored check-up programme.



18 HPC locations all over Germany ensure optimal time management, short travel routes and flexible admission planning.

Register for an individual check-up at any time at the International Office.

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