A guide to our clinics

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Values and philosophy

Honesty, respect and trust

Cooperation and humanity govern our behaviour at all times, irrespective of religion and social or ethnic origin. Trust is essential for personalised care. Only an open approach to patients and their relatives creates the basis for optimum care and treatment. We attach great importance to face-to-face discussions. Treatment will only be effective if the patient feels like a “partner” and this accelerates the healing process. We encourage this partnership by including the patient and his relatives in the decisions made by our staff. Openness, transparency and participation are the foundation for targeted treatment. Our patients should always feel well-advised and informed. We are therefore always open to criticism and suggestions from patients.

This principle also applies to close, constructive cooperation with other health institutes and of course between members of staff. Multidisciplinary teamwork and mutual respect is at the heart of our work, in line with the ongoing social change within our society.

Another pillar for successful treatment is the integral use of modern medical and technological procedures. Advanced and continuous training of doctors and nursing staff guarantees the standard which has become the directive for our clinic: always on the cutting edge of development. For a forward-looking service company, which operates according to economic and ecological considerations, this standard is one of the key factors of our success.

Two long-established hospitals

Your health is our priority

Knappschaftsklinikum Saar GmbH consists of two hospitals: Püttlingen and Sulzbach. As Saarland University hospitals, they belong to the top clinics in the region, which is close to the French and Luxembourg borders.

As a modern health centre, the Knappschaftsklinikum Saar GmbH follows one motto: “Your health is our priority”. It adheres to the highest quality standards in medicine and healthcare: both hospitals are KTQ accredited (cooperation for transparency and quality in healthcare) and are equipped with certified breast, bowel and vascular centres as well as an MS centre. Innovative instruments and comprehensive knowledge management ensure that patients benefit from the latest diagnostic methods and treatment procedures. A balanced diet and seasonal cuisine using fresh, local produce create a healthy balance for the organism. Püttlingen offers accommodation in comfortable 1 or 2 bed patient rooms. Sulzbach also has a fully-equipped comfort station: cosy rooms with fridge and en-suite bathroom provide added well-being. This is rounded off with the latest in entertainment technology: telephone and fax connection, separate Internet access and flat-screen television.

With 19 specialist medical departments, 4 centres, 2 certified stroke units, two nursing schools, a wide variety of special facilities and numerous partnerships with other social institutions, the Knappschaftsklinikum Saar is one of the most proficient medical institutes in the Saar-Lor-Lux region.
Knappschaft – more than just social insurance

The Knappschaft is Germany’s oldest social insurance company. Miners created “Knappschaftskassen” (welfare funds) as a form of social aid as far back as the Middle Ages. Regional welfare unions then developed. They were united in 1924 to create the “Reichsknappschaftverein” (Imperial welfare union) which then became the “Reichsknappschaft” in 1926.

At the end of the Second World War, so-called regional “Knappschaften” (insurance funds) continued the activities of the former “Reichsknappschaft”. One of these insurance funds, the Saar Knappschaft, was responsible for the Sulzbach Hospital. In August 1969, the “Bezirksknappschaften” (Regional insurance funds) were centralised in the “Bundesknappschaft” (Federal Insurance Fund) with its head office in Bochum. The Bundesknappschaft, Bahnanstalt (Railway Insurance Institution) and Seekasse (Seamen’s Accident Prevention and Insurance Association) merged in October 2005 to become the “Deutschen Rentenversicherung Knappschaft-Bahn-See” (KBS).

The KBS is a comprehensive social insurance agency and the group includes medical insurance, a medical network, pension insurance, a private pension scheme, social security for seafarers and a mini-job centre. KBS also runs a network of efficient spa facilities and hospitals. The Knappschaft’s medical network employs over 2,000 doctors and 5,200 medical care experts in rehabilitation clinics, hospitals and socio-medical departments. They provide efficient medical care of an excellent standard.

Püttlingen Hospital

Püttlingen Hospital is one of the oldest hospitals in Saarland. It was built and inaugurated in Völklingen in 1865 and developed from what was then a military hospital into a modern hospital with the opening of the new building in Püttlingen exactly 100 years later. As a Saarland University Hospital, it trains students during their practical year. A nursing college is also attached to the hospital, training young people to become nurses and healthcare professionals. The hospital merged with Sulzbach Hospital in 2012 to become the Knappschaftsklinikum Saar GmbH.

Sulzbach Hospital

Sulzbach Hospital is also one of the oldest hospitals in Saarland. It was built and inaugurated in 1862 and developed from what was then a military hospital into a modern hospital which has always enjoyed an excellent reputation, even outside the mining community for whom it was originally intended. It became a Saarland University Hospital in 1977 and trains students during their practical year. In 2003, it became the first hospital in Saarland to be awarded the coveted KTQ quality certificate (cooperation for transparency and quality in healthcare).

Today’s building was opened in 1987. A nursing college is attached to the hospital, training young people to become nurses and healthcare professionals.

The hospital merged with Püttlingen Hospital in 2012 to become the Knappschaftsklinikum Saar GmbH. Both hospitals are listed amongst the top clinics in the region which is close to France and Luxembourg.
Eye Clinic

A long tradition

The roots of our Knappschaft Eye Clinic stretch back to the 1920s. The Knappschaft set up an eye clinic in the centre of Saarbrücken as early as 1927. The clinic established an excellent name. It was the only eye clinic in Saarland at that time and was considered a pioneer in ophthalmology. The clinic in Saarbrücken was completely destroyed during the Second World War and was then provisionally housed in the Knappschaft military hospital in Sulzbach. The original provisional location finally became today’s Sulzbach Eye Clinic in 1988 first under Prof. Mester. Since 2010 Prof. Szurman ist the Head of the eye clinic. It enjoys an outstanding reputation far beyond the borders of Saarland.

Leader in retinal surgery

Our eye clinic has also enjoyed an excellent reputation in vitreoretinal surgery for many years. Progress in medication-based treatment of age-related macular degeneration is just one of the major milestones achieved over the past 5 years. We have also improved incisions during so-called vitrectomy. In many cases we can prevent blindness or improve the patient’s vision. We offer a particularly gentle procedure thanks to the instruments we insert into the eye: they now only have a diameter of 0.64 mm. The advantage for our patients is that the wound no longer requires stitches. The eye heals much quicker; patients feel less pain and can be discharged from the clinic earlier. We also successfully use this microsurgical technique for the treatment of retinal detachment, for retinal disorders caused by diabetes and for the removal of membranes which can form on the retinal surface. We use this procedure successfully on over 1,000 patients every year.

Retinal prosthesis restores sight to blind people

Many people suffer from retinal degeneration in which the outer layers of the retina (pigment epithelium and photoreceptors) are damaged. Sooner or later blindness is threatening. A new retinal prosthesis system enables these patients to regain their eyesight. The prosthesis functions by converting video images recorded by a miniature camera in the patient’s glasses into electrical impulses. They are transmitted wirelessly to the electrodes on the surface of the retina (epiretinal). This stimulates the retinal nerve cells (ganglion cells) and the patient perceives light patterns. The patient must learn to interpret these light patterns in a rehabilitation programme. The operation is carried out under general anaesthetic and lasts approx. 2 hours. An electronic chip is fixed on the surface of the retina (epiretinal) with the aid of retinal nails. The nerve cells (ganglion cells) are stimulated with the aid of this chip and the patient can perceive light patterns again. Professor Szurman has been involved in the development of this retinal microchip (retina implant) for many years. Our eye clinic in Sulzbach is amongst the first hospitals in the world to be classified as an accredited implantation centre for this special microchip.

"The future of surgical ophthalmology lies in micro-invasive surgical methods. These new techniques are already much more effective today and are, above all, much less invasive. Our patients value this."

Prof. Dr. Peter Szurman, Head of the Eye Clinic
Innovations in traumatic surgery and glaucoma surgery

We place particular impetus on modern and innovative surgical technology, which help us to reconstruct an eye after serious injuries. New surgical procedures also assist us in glaucoma surgery. The so-called "canaloplasty" is an innovative technique which enables us to reduce raised intraocular pressure in a particularly gentle and lasting manner: a microcatheter enlarges the eye’s drainage channel so that fluid can be drained naturally again. The numerous technical innovations and comprehensive surgical patient care in our clinic exceed that of many university eye clinics.

Retinal surgery:
- Retinal detachment surgery
- Diabetes, distortion and shrinkage of the retinal surface (epiretinal gliosis), hole formation in the centre of the retina (macular holes)
- Endotamponades with gas or oil
- Endolaser treatment

Canaloplasty for glaucoma:
- Latest procedure for surgical reduction of intraocular pressure

Lamellar keratoplasty with corneal disorders:
- Transplantation of inner layer of the cornea in the case of pathological changes which affect this layer (DMEK)
- In contrast to the standard penetrating method for corneal transplantation, this technique offers a quicker recovery of sight without modification of the refractive power, and a considerably lower risk of rejection

Reconstructive surgery after serious injuries:
- One of the few centres in Germany in which serious eye injuries can be operated on with astonishing success at times.
- Injuries can concern the cornea, lens, iris, sclera or retina

General and visceral surgery

General and visceral surgery includes the treatment of inflammatory and malignant diseases of inner abdominal organs. This involves all gastrointestinal diseases including major tumour surgery. At the Saar Gastroenterology Centre (MDZS), our goal is to find the best possible, personalised treatment for our patients in cooperation with specialists in internal medicine, radiation therapists, radiologists, urologists and gynaecologists.

Minimally-invasive surgery also plays a major role, besides tumour surgery: “Surgery is carried out with the smallest of incisions using lenses and instruments of just 5 mm in thickness. Large abdomen incisions are no longer necessary. The patient experiences less pain, the healing process is accelerated and hospital stays are reduced”, explained Dr. Hinnerk Gebhardt.

We also have considerable experience in the treatment of inguinal, incisional and umbilical hernias. We usually carry out hernia repair with a suture made of the body’s own tissue. With large incisional hernias, we work with tension-free titanium-coated synthetic mesh implants as abdomen wall replacements.


The advantages for our patients are that post-operative scars are scarcely visible and that wounds heal much quicker.

PD Dr. Hinnerk Gebhardt, Head of the General and Visceral Surgery Clinic

We have also succeeded in earning a reputation in coloproctology / pelvic floor insufficiency. Approx. 40% of all adults suffer from a disease or disorder of the colon or rectum at some point in their lives. We therefore work closely with our Gastroenterology Centre and offer a special surgical method which is unique in Saarland.

We carry out all thyroid surgery under continuous control of the vocal cord nerve. Surgery on hormone-producing organs (endocrine surgery on thyroid, parathyroid and adrenal glands) is part of our standard repertoire.

**Trauma surgery/Sports traumatology**

We focus primarily on the treatment of bone fractures and arm and leg injuries. Patients with severe and multiple injuries (polytrauma) are treated in close cooperation with the University Clinic in Homburg. We use state-of-the-art, minimally-invasive surgical procedures and high-quality implants, such as artificial articulations in the case of severe hip and shoulder fractures. Ruptured tendons (Achilles and quadriceps tendon rupture) are also part of our daily routine. Our hand surgery department also enjoys a good reputation for finger and metacarpus fractures. Surgical treatment of the carpal tunnel syndrome is also part of our clinic’s day-to-day operations.

**Range of services**

**Surgical treatment of inguinal hernia:**
- Surgery using Shouldice technique
- Surgery using Lichtenstein technique
- Endoscopic minimally-invasive techniques (TAPP, TEP)

**Surgical treatment of the gall bladder:**
- Conventional cholecystectomy
- Minimally-invasive techniques including the SILS procedure

**Minimally-invasive surgery on chronic bowel diseases and colorectal carcinoma:**
- Right hemicolecction
- Sigmoid resection
- Rectal resection, sphincter preservation

**Surgical treatment of incisional hernias:**
- Sublay, inlay and onlay techniques for mesh implantation using biological membranes
- minimally-invasive techniques (IPOM repair)

**Proctological surgery:**
- Haemorrhoids
- Chronic anal fistulas

**Surgical treatment and multidisciplinary treatment of malignant tumours:**
- In the colon and rectum, in the stomach and liver
- In the pancreas and biliary tract

The Vascular Centre in the Knappschaftsklinikum Saar in Püttlingen has a successful history. As the oldest, certified vascular centre in Saarland, we have been using state-of-the-art diagnostic methods for many years, enabling us to detect vascular disease at an early stage and treat it appropriately. Our vascular specialist consultants from vascular surgery, angiology, radiology, rheumatology and neurology work closely together here. We discuss diagnostic methods and treatment of individual patients in joint, multidisciplinary conferences and develop a personalised treatment programme. Regular training and quality control guarantees state-of-the-art vascular medicine.

**Early detection of vascular disease**

To ensure vascular disease is detected in time, we place emphasis on a wide range of screening tests with an in-depth consultation: individual risk factors must be detected at an early stage to prevent or delay the appearance of vascular disease. We work with modern ultrasound devices, computer tomography and magnetic resonance imaging in the diagnosis of large vascular regions. In special cases, a PET-CT scan can also be carried out. Modern radiological procedures assist us, for example in the diagnostic investigation of the abdominal artery (aorta), to enable early detection and treatment of a life-threatening aortic aneurysm (pathological enlargement of the main artery with the risk of a fatal rupture). Examinations of the carotid artery are important to prevent a stroke. With circulation problems in the legs, the likely cause is PAOD (peripheral arterial occlusive disease) which limits walking ability and quality of life.

With smaller vessels, functional examinations such as pulse wave measurement on fingers and toes, and vascular function tests help prevent leg ulcers. We can examine the smallest vessels under the capillary microscope and measure blood flow. These techniques are particularly important for diabetics and patients with rheumatic diseases.

**Surgical treatment of varicose veins**

We offer our patients conventional vascular surgery in the form of stripping and crossectomy (removal of the diseased vein and ligature of the diseased vein in the groin). We also carry out so-called minimally-invasive treatment of varicose veins (radio frequency ablation): it is a gentle procedure in which we introduce a probe into the vein via puncture. The probe generates heat which closes the vein. This operation avoids widespread scar formation, particularly in the groin.

Our patients can return to their normal activities (personal/professional/sporting) the next day, without any restrictions. They experience virtually no pain after the operation. The
Aneurysm on CT scan

Aneurysm on X-ray

Aneurysm on CT scan

Aneurysm on X-ray

Aneurysm on CT scan

Aneurysm on X-ray

The first stage is conservative treatment in which we tackle risk factors such as nicotine, excess weight and diabetes. Exercise therapy and medication-based treatment of secondary conditions is also prescribed. Interventional radiological, open surgery procedures and so-called hybrid interventions are used in advanced cases. Hybrid interventions are a combination of conventional and interventional techniques. Balloon dilatation or stent implants can be used to reopen small blockages or constrictions in the pelvic / thigh / calf region. We generally carry out this intervention in an outpatient setting. Blocked vessels can be reopened in open surgery treatment. This occurs primarily in the vascular system of the abdominal/iliac/ femoral and tibial arteries. We bridge large arterial blockages with so-called bypasses, which are made of synthetic prosthesis or grafts of the patient’s own veins.

Patients are given anticoagulant treatment for the duration of their in-patient stay and are discharged once they have regained good mobility.

The necessity for or urgency of surgery depends on the point of constriction in the artery. The operation is carried out through a small skin incision at the side of the base of the carotid artery is found in 10% of all strokes. They are often only discovered by accident.

When treating aneurysms, we offer our patients endovascular surgery with stent prosthesis, in addition to conventional surgery.

During conventional surgery, the abdomen is opened and the enlarged artery is replaced by a tube or so-called Y-shaped prosthesis. With endovascular surgery, a stent prosthesis is inserted into the enlarged artery via a small incision in the groin, under X-ray control, and the aneurysm is eliminated. This intervention is less traumatic for the body. Regular CT and ultrasound checks are necessary after a stent prosthesis has been fitted.

Vascular surgery treatment of a constriction of the carotid artery:

Constriction of the carotid artery can cause strokes. Early warning signs can be temporary paralysis, sensory disturbance, impaired speech or vision and headaches. A constriction of the carotid artery is found in 10% of all strokes. They are often only discovered by accident.

The necessity for or urgency of surgery depends on the point of constriction in the artery. The operation is carried out through a small skin incision at the side of the base of the neck. This intervention is carried out under general or regional anaesthetic. The intervention is atraumatic and patients can leave the clinic after just a few days.

Surgical treatment of PAOD

Patients with peripheral arterial occlusive disease complain of bad circulation in their arms and legs. It causes losses of mobility and reduces quality of life. Severe claudication and rest pain occurs depending on the stage of the disease. In advanced cases, inflammation occurs with poorly healing wounds.
The Gynaecology and Maternity Clinic has a successful history in Püttlingen. The team around head physician Dr. Martin Deeken enjoys state-of-the-art equipment. Everything is done in the nicely-furnished, renovated patient rooms to ensure that the patient is quickly back on her feet. The clinic is characterised by its outstanding multidisciplinary diagnostics and cooperation with the Institute for Radiology. This diagnostics unit is unrivalled in Saarland. The medical team places special emphasis on 3D ultrasound diagnostics with tumours and in the maternity clinic.

Oncological surgery

The gynaecology clinic has specialised in oncological surgery over the past years: all treatment decisions are taken according to the most recent findings by a multidisciplinary tumour board. This procedure has extended the clinic’s reputation beyond the borders of Saarland.

The medical team has specialised in cervical and vulvar cancer (cancer in the outer genitals). It uses new surgical methods in which surgery is carried out along the embryological structures. Surgery is less traumatic for the patient and survival rates are much higher. Radiation with its considerable side effects is no longer necessary after use of this surgical method on cervical cancer.

Advantages of the Breast Centre

The first, integrated Breast Centre in Saarland was set up many years ago alongside oncology. It offers all surgical procedures – from simple tumour removal to all reconstructive procedures. The medical team not only focuses on successful treatment of the tumour but also on achieving the best cosmetic results. This is mostly achieved by transposing skin from the patient’s own body, with small incisions. If necessary, our medical team is also able to carry out major reconstructive surgery with the aid of surgical microscopes. The patient’s own tissue is used primarily for this purpose. With sentinel lymph node removal, the treatment team no longer needs to make an additional incision in the armpit in 2/3 of cases.

Minimally-invasive surgery

Minimally-invasive surgery is replacing standard gynaecological operations more and more. It is also increasingly warranted in oncological treatment, endometriosis removal and urogynaecological surgery. Previously common abdominal incisions are therefore becoming rarer and patients recover more quickly.

Urogynaecology

In the Urogynaecology department, we offer all methods of treatment for incontinence. Besides conservative treatment such as pelvic floor training, biofeedback and medication-based treatment, the aim of surgery is to reconstruct all defects as far as possible with the patient’s own tissue, without foreign tissue. This reduces the long-term problems associated with synthetic tissue, such as pain, rejection and chronic inflammation to a minimum. We carry out surgery via abdominoscopy in the case of pelvic organ prolapses in particular, without the need for a disagreeable abdominal incision.

Advantages of the Fibroid Centre

In the Fibroid Centre, all means of treating fibroid-related complaints are offered, such as minimally-invasive surgery, hormone treatment and fibroid embolisation. This procedure releases synthetic beads via a catheter inserted into the groin, which blocks the blood vessels. This stops the blood supply to the fibroids which shrink in size. The main advantage is that we provide our patients with effective, atraumatic treatment without anaesthetic and surgery, in a much shorter time.
Gynaecology

Diagnostics:
• Breast ultrasound + 3D breast ultrasound procedure
• Digital mammography
• Elastography
• NMR breast scan
• Breast biopsy:
  – ultrasound-guided
  – x-ray-guided
  – NMR-guided
• CT
• CT-guided puncture
• PET-CT

Surgical treatment:
• Breast carcinoma (certified breast centre)
  – Free-flap breast reconstruction
  – Minimally-invasive sentinel lymphadenectomy
  – Intraoperative ultrasound diagnosis
  – Plastic surgery and reconstruction
  – Mastectomy with reconstruction
  – Sentinel lymphadenectomy
• Cervical carcinoma
  – Total mesometrial resection (TMMR)
• Vulvar carcinoma
  – Vulvar field resection
  – Sentinel lymphadenectomy
  – New free-flap, suture and adhesive techniques
• Ovarian carcinoma
  – Stage-related radical surgery
  – Minimally-invasive carcinoma surgery
  – Para-aortic lymphadenectomy
• Uterine carcinoma
  – Laparoscopic surgery
  – Para-aortic lymphadenectomy
  – Complete peritonectomy

Fibroid centre:
• Hysterectomy:
  – vaginal
  – laparoscopic
  – abdominal
• Fibroid enucleation
• Fibroid embolisation

Urogynaecology:
• Laparoscopic Burch colposuspension
• Laparoscopic sacro-colposuspension
• TVT
• Mesh inserts

Minimally-invasive surgery:
• Laparoscopic lymphadenectomy
• Endometriosis removal
• Adhesiolysis
• Uterine surgery:
  – Total laparoscopic hysterectomy
  – supracervical laparoscopic hysterectomy
  – laparoscopic-assisted vaginal hysterectomy
  – laparoscopic fibroid enucleation
• Ovarian interventions:
  – Ovariolysis
  – Dermal cyst extirpation
  – Adnexectomy
• Tubal surgery:
  – Salpingostomy
  – Salpingostomy with ectopic pregnancy
  – Fimbrioplasty
  – Salpingolysis
  – Salpingectomy
  – Tubal end-to-end anastomosis

Internal Medicine

The Knappschaftsklinikum Saar has 2 specialist departments for internal medicine. One of these long-standing specialist departments is situated in Püttlingen Hospital. It was opened in 1965 with the clinic. We have earned an excellent reputation over the decades. Our expertise in interventional endoscopy is widely recognised. Together with the Department of Surgery, we have created the Saar Bowel Centre. We also specialize in the treatment of biliary tract, pancreatic, oesophageal and gastrointestinal diseases.

The second clinic for internal medicine is in Sulzbach Hospital. It has 80 beds and is the largest specialist department in the hospital. Besides specialising in the gastrointestinal area and in gastroenterology, we also focus on heat and lung diseases. We are currently also setting up a Diabetes Centre.

“Interventional endoscopy”: non-surgical interventions

Modern instrument technology used with endoscopy (examination via the mouth or the bowel) not only allows diagnosis of diseases but also enables minor operations. We insert fine instruments through the tiny working channels (diameter between 2 and 5 millimetres) to remove tissue or even gall stones, to insert drains or small bridging tubes, without having to open the abdominal wall or chest cavity.
Polypectomy: gentle removal of polyps

We would like to help our patients avoid bowel cancer or detect it at an early stage; if cancer is found early enough, there is over 90 per cent chance of recovery. “We can remove polyps endoscopically – depending on the tumour stage and where it is in the bowel - and carry out histological examination”, declared Dr Matthias Maier. Depending on the situation, we may also use snare polypectomy with electric current or carry out “en-bloc” removal.

State-of-the-art endoscopes guarantee optimum image quality

Endoscopes with small ultrasonic probes at the tip enable high-resolution ultrasonic examination of the pancreas, biliary tract and gastrointestinal tract. This procedure is superior even to MRI and CT scans in some cases. We can simultaneously remove samples for histological examination. It also enables us to carry out special endoscopic surgery (biliary drainage, draining of pancreatic fluid or sclerotherapy of pain nerves).

Biliary and pancreatic diseases

The cause of jaundice often lies in a biliary or pancreatic disorder, whether it is gall stones preventing the flow of bile in the bile duct or the pancreas pressing on the biliary tract. An incision at the mouth of the bile and pancreatic duct enables the removal of stones and the insertion of a drain. Flow can then continue unhindered.

Inability to eat and drink – what then?

With many oesophageal diseases, food remains stuck before reaching the stomach. Depending on the situation, we enlarge constrictions with a balloon or we insert a self-expanding mesh tube (stent) in the oesophagus. If necessary we also place a tube through the stomach wall to guarantee life-long nutrition.

A heart that beats in rhythm

In the field of cardiovascular diseases, we have specialised in the treatment of cardiac arrhythmia for many years. We are particularly interested in electrical treatment with pacemakers, for which we are known nationwide. We also focus on the treatment of cardiac insufficiency for which we follow the latest guidelines.

Better assessment of complaints and physical capacity

Cardiopulmonary exercise testing (CPX) is becoming increasingly popular. Exercise tests are carried out with this special method, which lead to reliable conclusions on the cause of complaints such as breathlessness and premature exhaustion. CPX also helps us to determine the patient’s physical condition in comparison to people of a similar age. With athletes in particular, this can provide information on the point at which the body reaches the aerobic/anaerobic threshold: a parameter which is important for endurance sports such as jogging, cycling etc. The computerised analysis unit used in CPX draws on Prof Breuer’s decades of experience. He carried out several studies in which he developed new parameters.

CPX therefore enables reliable conclusions on physical capacity and the endurance limit and where this lies in comparison to maximum physical performance. The procedure is also particularly suited to a diagnostic assessment of breathlessness. According to Professor Breuer, “Spiroergometry can only be used sensibly if viewed as an important piece of the complete cardiopulmonary diagnostics puzzle.”

We can remove polyps endoscopically (polypectomy) – depending on the tumour stage and its position in the bowel – and carry out histological examination.

Dr. Matthias Maier, Head of the Internal Medicine Clinic Püttlingen

Spiroergometry can only be used sensibly if viewed as an important piece of the complete cardiopulmonary diagnostics puzzle.

Prof. Dr. Hans-Willi Maria Breuer, Head of the Internal Medicine Clinic Sulzbach
Internal Medicine

**Range of services**

**General check-up of internal organs:**
(recommended above the age of 45 / 50)
comprises:
- Physical examination
- Blood test
- Urine test
- Abdominal ultrasound
- Heart ultrasound
- Exercise ECG, better CPX
- Pulmonary function
- As requested and required: gastroscopy, colonoscopy
- Duration of stay 1-3 days depending on programme

**Check-up of cardiopulmonary function:**
comprises:
- Results of physical examination
- Analysis of breathlessness through spirometry
  (Professor Breuer is a leading expert in this field)
- Complete pulmonary function test with body plethysmography, measurement of CO transfer and analysis of strength of respiratory muscles
- Echocardiography / also cardiac CT and MR
- Exercise ECG / CPX Holter ECG
- Complete cardias, abdominal and vascular ultrasound screenings
- Blood pressure measurement over 24 h
- Bronchoscopy

**Work-up of unclear pancreatic, biliary, gastric or liver findings:**
Unclear findings in the pancreas and biliary tract:
- Abdominal ultrasound
- MRI and CT scan of pancreas
- Endosonography of pancreas with puncture
- Endoscopic retrograde cholangiopancreatography, MRCP
- PET-CT
- Duration of stay 1-4 days

Work-up of unclear liver lesions:
- Sonography and KM sonography
- CT and MR of liver
- Liver puncture
- PET-CT
- Duration of stay 1-5 days

Unclear gastric findings:
- Abdominal ultrasound
- Oesophagogastrroduodenoscopy
- Endosonography
- CT, MR
- PET-CT

**Sleep diagnostics**
- Sleep diagnosis (including sleep laboratory)
- Sleep apnoea diagnostics and if necessary introduction of a treatment with overnight ventilation

Urology

**Leading head of urological department,**
in team with associated chief physicians
Professor Dr. Harry Derouet, Dr. Frank Becker
and Dr. Christoph Pöncke

**Urological Clinic**

The urological clinic was founded in Sulzbach Hospital in 1994. It has a long and successful history, which began in Quierschied many decades ago. Diseases of the kidney, adrenal gland, ureter, bladder and urethra are treated and the clinic specializes in treatment of male reproductive organs, i.e. testicles, spermatic duct, seminal vesicle, penis and the prostate gland.

The department offers treatment of functional disorders of the urinary and reproductive tract and deals with all types of urological cancer.

The following examples highlight the main aspects of the different specialisations of the leading team:
New red-light laser technology treats benign prostate disease
Various surgical methods are available for the treatment of benign prostate hyperplasia. The urological department is specialised, amongst other treatment options, in a new laser therapy which not only vaporises the prostatic tissue but also enables surgeons to cut prostatic tissue. This has many advantages: the tissue is conserved for histopathological examination and prostatic blood vessels are coagulated immediately while cutting the tissue, thus, blood loss can be avoided. A special technique of this laser treatment can also preserve spermatic ejaculation, potency and thus, also fertility. Due to this method, patients recover quickly after surgery and the hospital stay can be reduced.

Kidney-preserving surgery in renal cell cancer
Beside radical surgical procedures for prostate cancer and bladder cancer, the urological department also provides specialisation in surgical procedures in treatment for renal tumours. With nephron-sparing surgery only the tumour of the kidney is removed while the healthy part of the kidney remains. The four surgeons are specialised in organ-preserving surgery, even in larger kidney tumours. “If a part of the apple is rotten, there is no need to throw it away immediately. You can cut out the rotten part and still use the apple”.

This example is also transferable to the treatment of renal tumours. The healthy kidney tissue is preserved. The urological department focuses on organ preservation with consideration of overall oncological safety for each specific tumour.

Minimally invasive treatment of kidney and ureteral stones
The modalities of treatment of urinary stones have changed enormously in the last decades. Due to the continuous development of ever miniaturized instruments, stones of the urinary tract can today be removed by minimally invasive access. Actual treatment modalities comprehend extracorporeal shock wave lithotripsy (disintegration of stones by external shock waves), intraluminal holmium laser lithotripsy or percutaneous surgery of the kidney by miniaturized access tract. With holmium laser disintegration, it is now possible to reach every stone position, using a special device inserted through a natural orifice without any incision. This special extremely flexible equipment can actually reach every position in the kidney. For the removal of larger stones, a minimally invasive, percutaneous treatment has been developed to avoid complications.