Mission and Structure

The Clinic of Surgery I offers services in general, visceral, vascular, and pediatric surgery. The clinic has 132 beds, including intermediate and intensive care units. Six thousand surgical procedures are performed every year. The health care centre offers specialized services include surgeries for tumours (interdisciplinary), oesophagus and gastric illness, gallbladder and pancreas, endocrine diseases, gastrointestinal diagnosis, endoscopy, proctology with endosonography, and vascular and pediatric surgery.

Clinical Services

Onological surgery is an important focal point of the clinic. The patients are treated following recommendations from the interdisciplinary tumour board. Special expertise exists in the care of gastric, pancreatic and intestinal cancer, primary and secondary liver cancer, and thyroid cancer. In the last two years oesophagus, colon, and rectal cancer have been treated with minimally invasive surgery. The endocrinology surgery offers thyroid surgery with monitoring of the recurrent laryngeal nerve. The dysfunction of parathyroid and adrenal glands is treated with minimally invasive surgery. The coloproctology offers therapeutic procedures for hemorrhoids, constipation, and complicated anal fistulas. Special expertise also exists for the care of abdominal wall hernias. Patients with morbid adiposity are cared for by an interdisciplinary team of surgeons, internists and psychologists ("Würzburger Model"). The pediatric unit provides the best of care for the full range of clinical pediatric needs. These include the operative care of premature infants, therapy of birth deformities, basic pediatric urology, and pediatric traumatology. The vascular surgery treats abdominal aortic aneurysms with aorta-iliacal bifurcation prostheses. Aorta and iliacal vascular diseases are treated with endovascular procedures. Our surgeons are well experienced in femur crural artery bypass surgery and in carotid artery surgery.

Major Research Interests

Clinical Research

The clinic applies the latest suture systems and laparoscopic operating procedures. The vascular surgery evaluates modern combined endovascular and operative procedures for the treatment of aneurysms and the peri-arterial obstructive disease. The clinic is part of one international and several national multi-centre studies, involving, among other things, the therapy of reflux gastritis, therapy of rectal cancer, liver metastases, and acute cholecystitis. In addition, procedures for distal/caudal pancreatocystectomy are evaluated. The oncological group carried out a random trial on the reconstruction of the food passage following gastrectomy and a trial following deep anterior rectum resection. Several publications demonstrate the quality of the clinic’s medical health care in all working groups.

Experimental Research

Experimental Surgery and Molecular Oncology have both established their own working groups for experimental research. Experimental Surgery, with their main focus on immune biology/cell therapy, analyzes tolerance mechanisms following experimental organ transplantation and cell therapy approaches to heal diabetes mellitus. Molecular Oncology analyzes the immune response to gastrointestinal tumours to develop diagnostic and therapeutic approaches. Close cooperations exist with the Harvard Medical School in Boston/USA, the universities of Oxford/UK and Rochester (New York)/USA, the Prince of Wales Hospital in Sydney/Australia, the Ludwig-Maximilians University in Munich and, of course, the institutes and clinics of the University of Würzburg Hospital and the university.
Teaching

All aspects of modern surgery are covered in lectures and seminars; bedside teaching was optimized. An Interdisciplinary Training and Simulation Centre (INTUS) was established in the SkillsLab to give the students more opportunities to improve their operating skills on training simulators under realistic conditions. Training courses for thyroid surgery and microsurgery, laparoscopic operation procedures, as well as advanced training in gastrointestinal diagnostics and endosonoscopy are offered on a regular basis.

Fig. 2: The goal of transplantation research is to prevent the destruction of organ transplants. In addition to effector immune cells the immune system also has so called regulatory immune cells. They are able to stop immune responses but normally their amount is too low to protect organ transplants (A). Therefore, increasing the amount of regulatory immune cells and reducing the amount of effector cells after transplantation (B) seems to be promising for experimental and clinical research.


