Heart | Circulatory System
SPECIAL FIELDS
Minimally invasive reconstruction of mitral- and aortic valve, complete myocardial revascularization with double mammaria, valve surgery (aortic-, mitral-, tricuspid replacement, mitral valve reconstruction), aortic surgery including supra-aortic branches, cardiac tumors, rhythm surgery.

EXPERT PROFILE
Prof. Dr. med. Walter Eichinger is the Head of the Department for Cardiac Surgery and Cardiac Surgery ICU at Bogenhausen Hospital since 2009. He began his professional career at the Ludwig Maximilian University München at Bogenhausen Hospital and since 1999 he worked at the Deutsches Herzzentrum München (German Heart Centre). Prof. Dr. med. Walter Eichinger has the certification for Cardiac Surgery and Cardiac Surgery Intensive Care Medicine.

His clinical focus is the reconstruction of cardiac valves, e.g. aortic-, mitral- and tricuspid valves. In various international assignments in Toronto and Brussels he gained expertise in highly specialized surgical techniques and has been known as expert for these techniques for years. Most of these procedures can be performed with the application of minimally invasive techniques. This has a number of advantages for the patient: it is possible to avoid the risks of an artificial cardiac valve when the patient’s own valve can be preserved. By means of gentle minimally invasive surgery techniques the rehabilitation period for the patient is much shorter. The intervention produces less stress, wound healing is completed faster than in conventional surgery. Even for very elderly and somewhat frail patients we offer state-of-the-art gentle procedures for treatment of cardiac valve diseases in cooperation with the other cardiological specialists in Munich Municipal Hospital Group. In Bogenhausen Hospital the department for cardiac surgery performed more than 500 catheter valve implantations (TAVI) and a large number of mitral clippings so far.

Prof. Dr. med. Eichinger also has extensive expertise in all areas of coronary surgery, of aortic surgery, or surgical care for congenital heart defects and the treatment of cardiac insufficiency.
SPECIAL FIELDS
Ambulatory heart catheter and cardioversion, PTCA and stent-implantation, EPU. 3D mapping and catheter ablation, pacemaker and ICD-implantation, biventricular cardiac insufficiency therapy (CRT), clarification of syncopes by means of tilt-table-examination, percutane aortic valve implantation, aortic stenting, cryoablation of atrial fibrillation, PFO-closure, TAVIS.

EXPERT PROFILE
Prof. Dr. med. Ellen Hoffmann is the Head of the Department for Cardiology and Internal Intensive Care since 2003. Bogenhausen Hospital is a maximum care hospital and academic educational hospital of the Technische Universität München. The Department has 106 beds on 3 normal wards and a certified Chest Pain Unit. We treat approx. 6,000 patients with cardiovascular diseases per year. All modern invasive and non-invasive diagnostic and treatment methods are available, including heart-CT and MRI. Medical focus, however, is on invasive diagnostic and therapy of heart diseases.

Emergency care for patients with myocardial infarction and coronary heart disease is offered here in 24h emergency duty.

In heart catheter laboratories we perform procedures at coronary arteries, kidney and carotis arteries as well as aorta, e.g. balloon dilatation or stent implantation. In cooperation with the cardiac surgery department we implant minimally invasively new aortic valves at aortic stenoses in the process of heart catheter procedure via the groin. For selected patients with insufficiency of the mitral valve, we perform interventional treatment with a cardiac valve system. We also implant modern cardiac pacemakers and defibrillators, which are an important option as resynchro-
nization therapy for patients with cardiac insufficiency. Catheter guided renal sympathetic de
ervation is a successful option to treat therapy refractory blood pressure conditions. All modern therapy methods are under precise quality con
trol. Patients are asked to participate in quality-assurance-registers to evaluate effectiveness and risks of these procedures.

Scientific focus for Prof. Dr. med. Ellen Hoff
man is the interventional diagnostic and treat
ment of cardiac arrhythmia (electrophysiology, ablation). By means of radiofrequency current (heat) or cryo technology (freezing) symptomatic cardiac arrhythmia is treated today with a very good chance of success and at low risk. This in
cludes supraventricular cardiac arrhythmia (SVT, AVNRT, WPW, atrial flutter) as well as atrial fibril
lation and ventricular cardiac arrhythmia (ventricu
lar tachycardia, VES). Three-dimensional map
ping systems (NAVX, Carto3) help in clarification of mechanisms and for orientation during ablation. Tactile ablation catheters and intracardiac ultrasound increase safety for the patient.

**Internal Intensive Care**

The ICU has 28 beds comprising 16 with respiratory systems and 12 with monitoring units. Here state of the art life saving methods are applied, e.g. intermediate circulatory support sys
tems (balloon and impella-pump), kidney substitution systems with haemofiltration and lung support by means of extracorporal oxygenation (artificial lung).
SPECIAL FIELDS

Ambulatory and interventional heart catheter in hybrid-intervention area (intravascular ultrasound, intracoronary pressure wires, PTCA, stent-implantation, rotablation angioplasty, reconstruction of coronary occlusion (CTO), balloon dilatation of aortic valve, catheter supported aortic valve implantation (TAVI), percutane mitral valve annuloplasty, catheter supported mitral valve reconstruction, circulation support systems (Impella, IABP) and minimalized heart-lung-machine, interventional closure of PFO and ASD, 24/7-heart catheter stand-by-duty, carotis-stents, 3D- and transoesophageal echocardiography, stressecho cardiography, pacemaker-ICD-implantation and cardiac insufficiency therapy (CRT, CCM), sleep apnoe screening, bronchoscopy with laser intervention, home-oxygen therapy, intensive care for most severe and complex diseases with organ failure including haemodialysis, interventional lung support (ILA), stroke-lysis therapy.

EXPERT PROFILE

One of his medical specialties is the application of minimally invasive techniques for treatment of the aortic valve, the mitral valve and the coronary vessels. Prof. Dr. med. Sack implanted the first catheter supported aortic valve in Germany in 2005 (he then was at the University Clinic Essen) and he is known internationally as expert for this technique. Minimally invasive reconstruction of the mitral valve is also his expertise. Complex interventions under application of extracorporal circulation or circulatory support systems can be performed in the hybrid-intervention area. There is a close cooperation of cardiac surgery, vascular surgery, angiology and radiology in performing these procedures. One more specialty is chronic cardiac insufficiency with cardiomyopathy.

Prof. Sack significantly participated in developing the cardiac resynchronization therapy (CRT) and he performed the first implantation of a CRT-system in 1998. The department also offers the new procedure called CCM-therapy (cardiac contractility modulation) to improve the pump-function of the heart. Patients requiring intensive care are treated in one of the three internal ICUs in the central intensive care area (ZIB) with all state-of-the-art procedures of non-invasive and invasive artificial respiration, circulatory support and renal replacement methods. The emergency centre in Schwabing Hospital cares for more than 50.000 patients per year. There is 24h-standby-duty for acute myocardial infarction.