
General information

2nd Department of Internal Cardiovascular Medicine is a fully specialized medical center for cardiac and peripheral vascular diseases. We offer a large spectrum of complex diagnostic and therapeutic modalities in cardiology and angiology. The department is equipped with high-end diagnostic instruments, disposes of three dedicated intensive care units and closely collaborates with cardiac surgery department of the General Teaching Hospital.



The long history of the Department started 120 years ago. In the past decades, the original broad spectrum of disciplines was reduced and the Department fully specialized in **cardiology and peripheral vascular diseases** (angiology). For our patients from abroad we are able to provide communication in English, French, German and Russian. Nowadays we are offering major specialized programs and services as follows:

Invasive and intensive cardiac care

The Department is equipped with high-end catheterization laboratory, newly reconstructed in the year of 2007. We are providing 24-hour service for direct angioplasties for acute coronary syndromes. A wide spectrum of coronary interventions is offered including intravascular ultrasound explorations with virtual histology capabilities. Modern methods as atrial septal occluder and transcatheter aortic valve implantation are currently applied as well. The invasive cardiology

is supported by 8 beds of coronary care unit offering a large spectrum of invasive care possibilities, including invasive and noninvasive ventilation, application of mild hypothermia in patients requiring cerebral protection after resuscitation, bed-side hemoelimination methods, intra-aortic balloon counterpulsation etc.

Arrhythmology services

Arrhythmology is widely developed, disposing two new catheterization laboratories and dedicated arrhythmia management intensive care unit. The program is focused on implantable devices (pacemakers, resynchronization therapy, implantable defibrillators) and radiofrequency ablation techniques.

Noninvasive cardiology and valvular heart disease service

Noninvasive cardiology offers the full spectrum of available noninvasive explorations in cardiology, including echocardiography, Holter ECG monitoring, ambulatory blood pressure monitoring, exercise testing (both bicycle and treadmill) etc. Echocardiography is playing the key role in noninvasive examinations. The department is now equipped by 4 high-end devices and 2 smaller echocardiography machines for a bed-side explorations.

Pulmonary hypertension center

One of major programs developed in the department is specialized in diagnosis and treatment of pulmonary arterial hypertension. A complete diagnostic spectrum is provided in close collaboration with other departments and units of the General Teaching Hospital. A wide spectrum of therapy is administered to patients treated in the Center including orally active drugs, and subcutaneously, intravenously or inhaled prostanoids. The Center is representing the largest of its kind in the Czech Republic.

Peripheral vascular diseases

The Department disposes of unique intensive care unit for patients with critical peripheral vascular disorders such as extensive deep veinous thrombosis or critical limb ischemia. Invasive diagnostic catheterization laboratory is dedicated for peripheral vascular diseases and allows treating patients both with interventional procedures and local thrombolysis. The close connection with cardiology services allows providing high standard of care for patients with concomitant cardiac disease, particularly frequent in patients with peripheral occlusive arterial disease.

Fabry disease center

The Department harbors the Center for the diagnosis and treatment of the Fabry disease. The care for this rare lysosomal storage disease is centrally managed for the whole country. More than 100 patients are now being followed-up in the Department. New treatment options are progressively developed and offered to patients fulfilling indication criteria.

Education and research

As a University Department we are providing large spectrum of teaching courses for Czech medical students and English parallel students. Several postgraduate students are working in the Department as well. Clinical research is extensive and focused on all spectrum of diseases and patients groups treated in the Department. Our research activities are supported by several governmental grants and research projects.

