

Comment

All the papers that fill this issue of the journal relate to therapeutic methods belonging to the interventional radiology. It is a subspecialty of diagnostic radiology which uses minimally invasive methods to treat several illnesses; primarily cardiovascular and cancer diseases.

Interventional radiology developed on the border of radiology and surgery, combining some elements of both of these disciplines. Features which distinguish procedures performed by interventional radiologists from surgical operations are the different ways of reaching organs which require treatment. Cutting the skin and tissue dissection have been replaced by percutaneous puncture and introduction into the vascular system, urinary tract, genital tract or body cavities the precise microinstruments like balloon catheters, fiber lasers, baskets, scalpels, filters, stents and others. Interventional radiology procedures are less invasive than surgical. Usually do not require general anesthesia and are not associated with extensive blood loss or violation of tissues, therefore may also be performed in patients ineligible for surgery due to severe clinical condition.

Most of the papers in this issue deals with the methods of endovascular treatment of vascular diseases of different etiologies. Balloon angioplasty and stenting allow for the effective treatment of stenosis and peripheral arterial occlusion of the subclavian artery and arteries of the lower limbs. These methods are also used in restoring the patency of venous vessels occupied by a tumor. New therapeutic possibilities were created by flow diverting stents that are primarily used in the treatment of giant intracranial aneurysms. Their images are particularly impressive in the three-dimensional reconstructions (pictures on the cover).

Particularly noteworthy a series of four papers depicting the possibility of interventional radiology methods that can be effectively used in the treatment of gynecological diseases: uterine fibroids, pelvic congestion syndrome, obstruction of the fallopian tubes. They can be also a life-saving procedures in the cases of postpartum hemorrhages.

Very valuable in terms of cognitive and clinical practice is the work on the possibility of monitoring patients with abdominal aortic aneurysms after endovascular treatment with stent-grafts. The most commonly used method of treatment of aortic aneurysms requires, according to the standards, continuous monitoring of these patients after the procedure. So far, computed tomography is performed in these patients, which adversely affect them by the high X-rays dose and contrast medium. Studies conducted by our center have shown that non-invasive Doppler ultrasound examinations are equally effective and may become the test of choice in monitoring these patients.

Interventional radiology is one of the fastest growing medical discipline now. The introduction of endovascular treatment methods has been a breakthrough in the development of numerous medical specialties and particularly cardiology, vascular surgery, neurosurgery and oncological surgery.

Prof. Małgorzata Szczerbo-Trojanowska, MD, PhD