

remains on the normal left side of the thorax, we can speak about a much rarer condition (1 in 22.000 of the general population) known as situs inversus with levocardia or situs inversus incompletus.

Material and Methods: In this paper we refer to a 42 years old patient with situs inversus totalis and cardiovascular pathology due to subacute bacterial endocarditis of the aortic valve complicated with the perforation of the anterior cusp of mitral valve associated with severe aortic regurgitation and moderate mitral regurgitation, NYHA class IV heart failure admitted in IBCV "Prof. Dr. George I. M. Georgescu" Iași for dyspnea at rest, fatigue, swelling of the lower limbs, cough. Preoperative invasive and noninvasive examination revealed multiple cardiovascular injuries. The surgical approach was aortic valve replacement with mechanical prosthesis and reconstruction of the anterior leaflet of the mitral valve with autologous pericardial patch.

Results: The post-operative evolution was favorable and the control echocardiography showed normofunctional aortic valve prosthesis and normal coaptation of the mitral valve leaflets with no signs of cardiac decompensation.

Conclusion: Dextrocardia is a rarely seen cardiac malposition, often associated with multiple and complex congenital cardiac anomalies. Valve surgery for acquired valvular lesions in dextrocardia with situs inversus is also rare. Surgeons require a prospective strategy for handling problems such as poor exposure of the cannulation site and diseased valve. The case illustrates the anatomic issues and operative considerations particular to aortic and mitral valve surgery in patients with this condition.

Key words: Situs inversus, mitro-aortic endocarditis, aortic insufficiency, anterior mitral valve perforation

14. THE EXTRAANATOMIC BY-PASS IN VASCULAR SURGERY

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Introduction: The term "extraanatomic" is used to outline vascular grafts, the paths of which lie through regions completely different from the arteries they by-pass. Although modern vascular surgery upholds several extraanatomic by-pass procedures, the precise indications for these surgical interventions, as well as the selection of patients and the proper surgical technique, have not been completely set yet.

Purpose and objectives: The study aims to assess the specific indications for extraanatomic by-pass, the proper surgical technique and patient selection.

Materials and methods: 13 extraanatomical by-passes were performed during the period of 2010-2014. All patients fell into 3 groups:

-Critical inferior limb ischaemia associated with advanced cardio-vascular and pulmonary pathology (n=6): all patients underwent femuro- or ilio-femural cross-overs. -Suppurative processes (n=3): all patients underwent femuro-femural or ilio-femural cross-overs.

-Vascular trauma (n=4) associated with damage and infection of adjacent tissues: 2 crossovers (1 ilio-femural and 1 femuro-femural) in case of ilio-femural axis damage, 1 femuro-popliteal by-pass (graft placed subcutaneously), 1 suprafascial brachio-brachial by-pass.

Results: The results highly depend on the vascular bed patency. Patients in critical limb ischaemia with obliterant atherosclerotic background, advanced cardiovascular and pulmonary diseases or those with suppurative processes are prone to a poor vascular bed. In the first 2 groups, 1 femuro-femural by-pass thrombosed in the immediate postoperative period (amputation was required), 2 of them remained patent up to 6 months, 2 of them up to 1 year and the other 4 cross-overs more than 1 year. In the third group, all by-passes remained patent during all follow-up period (up to 8 years).

Conclusions: Extraanatomical by-passes serve as an alternative to classical revascularization in certain groups of patients. These procedures are especially indicated in patients with contaminated vascular grafts or suppurative processes. Another group of patients are those with

advanced cardio-vascular and pulmonary diseases. Axilo-femoral and femuro-femoral by-passes being far less traumatic than their aortofemoral counterpart (although hemodynamically less favorable) are indicated in arteriopathic patients to save limbs in critical ischaemia, but not to treat intermittent claudication. In patients with vascular trauma associated with infected wounds, the extraanatomical by-pass is the procedure of choice.

Keywords: Extraanatomical by-pass, vascular grafts, crossover by-pass

15. NONTHERAPEUTICAL EXPLORATORY LAPAROTOMY VS HEMOPERITONEUM SOLVED NONOPERATORY: EXPERIMENTAL STUDY BY COMPARISON

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Introduction: The nonoperative approach to patients with traumatic injuries of intraabdominal parenchymal organs with hemoperitoneum considering its local and systemic effects still represents an issue discussed and controversial because of yet unknown evolutionary aspects of hemoperitoneum. The morphological, biochemical and bacteriological analysis of hemoperitoneum solved nonoperative in comparison to the changes induced exploratory laparotomy by means of experimental study.

Materials and methods: 23 rats, divided in: group I (n=17) – hemoperitoneum with nonoperative approach (HP-TNO), which has been introduced integral blood intraperitoneal (V=3,0 ml); group II (n=6) – exploratory laparotomy (LE). The rats were sacrificed after 25 days, the adhesion process were noted using known scores, biochemical and bacteriological modifications also.

Results: Adhesions were observed in the entire LE group of rats (100%) and only in 13,3% HP-TNO group ($p<0,05$). Adhesions in the LE group was vascularized and significantly thicker and more resistant ($p<0,05$), in LE group adhesions involved from 25% to 75% of the injured surface in comparison to HP-TNO group where adhesions involved only less than 25% surface from the initial place of blood inoculation. All 25 adhesions (in 6 rats) in the LE group were divided, according to Binda, as follows: 2 - gr. I, 15 - gr. II, and 8 - gr. III versus HP-TNO group with 2 - gr. I adhesions. The adhesions total score was significantly higher in LE group. The blood collected from rats was examined biochemically to determine medium molecular weight substances (SMMM), necrotic substances (SN), urea, serum iron and total protein. We found significantly higher level of SMMM in LE group ($p<0,05$), indicating increased protein degradation processes. It was established also an insignificant prevalence value of SN in LE group indicating increased inflammatory process. The peritoneal fluid and mesenteric lymph nodes cultures showed no bacterial growth, which means no bacterial translocation in both groups of rats.

Conclusion: The experimental study demonstrates that nonoperative treatment of hemoperitoneum does not involve additional risks and is less aggressive than nontherapeutic exploratory laparotomy this is confirmed by significantly lower adhesion process and biochemical indices showing predominance of degradation processes in rats with laparotomy. The negative bacteriological tests invalidate the bacterial translocation hypothesis under haemoperitoneum.

Key words: hemoperitoneum, nonoperative treatment, exploratory laparotomy

16. TRAUMATIC DIAPHRAGMATIC RUPTURES

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Introduction: Traumatic diaphragmatic ruptures (TDR) present significant diagnostic challenge and are potentially fatal. TDR are uncommon, the best majority being induced by blunt abdominal trauma, still these can be induced by abdominal, thoracic or thoraco-abdominal wounds.