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CLINICAL RESULTS FROM STENTLESS AORTIC VALVE REPLACEMENT

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BACKGROUND: Mechanical either biologic prosthesis have some disadvantages such are continuous anticoagulation therapy, lost Valsalva sinuses influence on blood flow, or middle pressure gradient. With this study we evaluated clinical results of stentless 3 leaflets pericardial patch in patients undergoing aortic valve replacement.

METHODS: We created this stentless valve using bowline/equiné pericardium, replacing valve cusps on aortic fibrous ring of patient. The ring of patient's aorta was used as guide for sizing this valve. Leaflets are implanted separately; using continuous sutures with 2 supported stitches at newly created commissure, without a stent or sowing ring. Patients with aortic valvular stenosis have been included.

RESULTS: 30pts with aortic valvular disease (25 with aortic stenosis, 4 with aortic insufficiency and 1 with bicuspid aortic valve) had been enrolled in this study. Patients were divided into two groups (mini-maze procedure, n=19, LA procedure, n=21). Electrocardiogram and echocardiogram were performed immediately, 1 week, after 6 months postoperatively. RESULTS: The mean age (50.4±8 vs. 50.8±9 years), preoperative left atrial size (5.9±0.8 vs. 5.6±0.7 cm), mean pulmonary artery pressure (37±16 vs. 40±19 mmHg), mean left atrial pressure (19±2 vs. 20±4 mmHg), NYHA functional class (2.4±0.4 vs. 2.3±0.3), duration of AF (4.0±3.8 vs. 4.1±3.1 year) and left ventricular ejection fraction (51±7% vs. 49±9%) were similar between the groups.

There was no operative mortality or morbidity associated with this procedure during follow-up. There are no significant difference in aortic cross-clamp times (133±24 vs. 127±27 min). At 7 days postoperatively sinus conversion rate were 79% vs. 78% and after 6 months follow up sinus rhythm maintenance rate were 84% vs. 78% between mini-maze procedure and LA procedure group, respectively.

The left atrial size was reduced and left ventricular ejection fraction was improved in both groups during follow-up, but there were no significant between each group.

CONCLUSIONS: The modified maze procedure such as mini-maze and LA procedure are effective surgical option in treating chronic atrial fibrillation in patients with mitral valve disease in terms of sinus conversion.
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RESULTS: Following Lepuridin treatment, the platelet counts started to recover. In the control echocardiography, the cardiac thrombus dissappeared and ST segment elevation returned to the base line. Warfarin treatment was discontinued. Between P06 ad P019 left leg had been operated for recurrent thrombi for 6 times. On P018, Lepuridin infusion was administered. On P019, below-the-knee amputation was performed.

BACKGROUND: Most patients with large left ventricular aneurysm undergo other linear resection of the dysskinetic area or endoventricular patch repair. Both techniques have numerous beneficial effects, but also several adverse sites. In order to avoid these imperfections, direct circular repair (DCR) was created.

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CONCLUSIONS: If HITTS is suspected, it is vital to discontinue heparin or LMWH immediately, and initiate an alternative anticoagulant since these of group of patients are highly susceptible to life threatening complications of thrombosis. Lepuridin provides reliable anticoagulation and allows rapid recovery of platelet count.

INTRODUCTION: Heparin induced thrombocytopenia-thrombosis syndrome (HITTS) is a rare immune mediated coagulation disorder that may manifest with multi organ failures due to thrombotic events. Herein we present a CABG patient who developed early onset HITTS postoperatively and resulted in limb amputation.

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RESULTS: From 03:00-12:06, 175 pts with anterior or anterolateral aneurysm have been operated. Evident haemodynamic improvements were noted: decrease of EDV from 316.5 to 182 ml, ESV from 250 to 102 ml, increase of EF from 20.5% on 37.2%, and CI from 1.8 on 3.2. Valvular reconstructions were performed when indicated. 160pts had been operated under total warm cardioplegia. Mean intubation time was 9±2.3h, mean dosage of omeprazolehemolines was 0.03 μg/kg/min, average inhospital stay 10±4.6 days. Early mortality rate was 6.9% (12pts).

CONCLUSIONS: Direct circular repair ensures geometric reconstruction of the LV, without use of foreign body after maximal resection and exclusion of the non-viable myocardium. In combination with total myocardial revascularization and valvular reconstruction improves patient's condition with a good clinical benefit.
We performed autotransplantation on 2 cases. Case 1: 54-year-old male in end-stage heart failure due to end-stage of the mitral valve insufficiency and severe tricuspid insufficiency. Patient had enormous enlargement of left atrium (LA) (14x16cm) with interatrial septum aneurysmatically deformed (EF=30%, EDV=225ml, ESV=138ml). Case 2: 56-year-old woman with severe mitral stenosis and LA 15x16cm. Previous data for rheumatic fever in both. Using transsthoracic echocardiography the enormous left atrium due to primary severe mitral stenosis and secondary insufficiency and tricuspid regurgitation has been visualized. Diagnosis was confirmed with transesophageal echocardiography. Basic X-ray showed extremely enlarged left atrium. The patient developed cardiac cachexia, and atrial fibrilation during last eleven months. There were laboratory parameters for initial liver failure in both cases.

With aortotomy and complete heart excision, left atrium was large excided, in order to decrease its volume and reconstruct the interatrial septum. Mitril and tricuspid valve had been reconstructed (in case 1). In second case using aortic root enlargement. Clinical findings, blood culture, and serological tests were used for Brucella endocarditis. The ages of patients were 5-10 years. We performed AVR to 3 cases, and MVR to 2 cases after medical treatment. The Manughian procedure was performed to the small pulmonary fistula and aortic paravalvular abscess. The patient was discharged without complications and IE prophylaxis was given for 45 days. After three months, the patient had no symptoms and is still in sinus without any other complications (NYHA class 1).

CONCLUSION: Autotransplantation seems to be an efficient method to reduce extreme LA dilatation. Eventually should be considered as a method of choice for patients with atrial fibrillation due to extremely enlarged left atrium. Further study and longer follow-up are required.
A 3-year old boy was admitted for cerebrovascular accident with left sided hemiparesis in June, 2002. Oral anticoagulation therapy was started. Echocardiogram revealed a 4x2 cm mass in the left atrium protruding into the left ventricle attached 1 cm away from anterior leaflet of the mitral valve on the atrial septum causing restriction of mitral opening. The mass was excised from the areas of tumor and the myxoma was verified histologically. The patient was asymptomatic for 3 years until a diastolic murmur on the cardiac apex was detected in a routine auscultation. Echocardiography was performed. A new 3x3 cm mass originating from right superior pulmonary vein (RSPV) causing 2/4 mitral insufficiency was seen. In January 2005 the mass was removed with associated left atrial free wall also left atrium was excised from RSPV to auricle and the defect was reconstructed with xenograft pericardial patch. Histological examination revealed myxoma and resection borders were free from tumor invasion. The patient was discharged from hospital on the 4th postoperative day without any gradient or insufficiency of the mitral valve in echocardiogram. The patient is free of symptoms and masses. Myxoma is the most frequent primary cardiac tumor accounting for about 50% of all such lesions. Recurrent myxoma after surgical excision is uncommon in sporadic forms. The frequency is estimated by 1-5% in sporadic forms. Incomplete resection and familial predisposition can lead to reoccurrence. Intracardiac implantation of embolic fragments of the first tumor and also the existence of a sort of pretumoral focus in the myocardium are possible explanations.

**CVS-108 - RECURRENT MYXOMA IN A CHILD; SEEDING OR MULTIFOCAL DISEASE?**

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A 5-year-old girl was admitted to our clinic with the complaint of fainting. She had a history of palpitation and exertional dyspnea. Cardiac examination revealed a grade II/VI systolic murmur on the cardiac apex. Transesophageal echocardiography revealed a 4x2 cm mass protruding into the left ventricle attached 1 cm away from anterior leaflet of the mitral valve on the atrial septum causing restriction of mitral opening. The mass was removed as far as the areas free of tumor and the myxoma was verified histologically. The patient was asymptomatic for 3 years until a diastolic murmur on the cardiac apex was detected in a routine auscultation. Echocardiography was performed. A new 3x3 cm mass originating from right superior pulmonary vein (RSPV) causing 2/4 mitral insufficiency was seen. In January 2005 the mass was removed with associated left atrial free wall also left atrium was excised from RSPV to the auricle and the defect was reconstructed with xenograft pericardial patch. Histological examination revealed myxoma and resection borders were free from tumor invasion. The patient was discharged from hospital on the 4th postoperative day without any gradient or insufficiency of the mitral valve in echocardiogram. The patient is free of symptoms and masses. Myxoma is the most frequent primary cardiac tumor accounting for about 50% of all such lesions. Recurrent myxoma after surgical excision is uncommon in sporadic forms. The frequency is estimated by 1-5% in sporadic forms. Incomplete resection and familial predisposition can lead to reoccurrence. Intracardiac implantation of embolic fragments of the first tumor and also the existence of a sort of pretumoral focus in the myocardium are possible explanations.

**CVS-107 - SURGICAL TREATMENT OF MULTILAYER CYST OF THE LEFT VENTRICLE - A CASE REPORT**

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Echinococcus cyst in the heart, a life threatening condition, has incidence in localization of only 0.5-2%. We have described a case of a 5-year-old patient with echinococcus cyst localized in the mitral valve annulus of the left ventricle. At the beginning completely asymptomatic, a random x-ray examination a pathological formation in the left ventricle was found. Using a transthoracic echocardiography the existence of a multilayer cyst has been confirmed, located at the apex of the mitral valve with a diameter of 8 cm. The diagnosis was confirmed transesophageal echocardiography, computerized tomography and magnetic resonance imaging. The existence of other noncardiac localizations of the echinococcus was excluded. The coronary angiography was normal. The patient was treated for two years with benzimidazoles. Three and a half years later, the patient was enrolled for a surgical treatment. Through median sternotomy, in extracorporeal circulation with blood cardioplegia, we approached toward complete excision of the cyst. With apical opening, a multilayer cyst with dense colloid mass was found. Following puncture-and-aspiration of the cyst, the mass with instillation of hypertonic solution, the pericystic sheath was resected down to an intact myocardium. The septal defect was closed with two circular sutures. The operation underwent without complications, and the patient's functions were stable following intervention.

**CVS-106 - MITRAL ANNULAR MYXOMA IN AN OLD AGE PATIENT**

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**INTRODUCTION:** Heart valves are extremely rare locations for cardiac tumors to originate, either as the primary site or the site of recurrence. Intracardiac myxomas with an estimated incidence of 0.5-1 per million, constitute about 50% of all primary heart tumors and cardiac myxomas arising from the mitral valve is extremely rare. The most common presenting symptoms of cardiac myxomas are obstructive symptoms, embolism, and constitutional symptoms.

**CASE PRESENTATION:** A 71-year-old female was admitted to the hospital with the complaint of fainting. She had a history of palpitation and exertional dyspnea. Cardiac examination revealed a grade II/VI pansystolic murmur heard at the apex. Her electrocardiogram and chest roentgenogram showed no specific changes. Transesophageal echocardiography revealed mild to moderate mitral regurgitation with a 1x2x2 cm mass on the posterior mitral annulus and the mass was prolapsing into the left ventricle during diastole. The patient was operated. After left atriotomy, posterior leaflet and subvalvular components of the mitral valve were normal in configuration. The mass was excised from the P1 segment of posterior mitral atrial annulus.

**DISCUSSION:** Myxoma is the most common primary cardiac tumor of the heart accounting for almost 50% of the benign cardiac tumors in adults, but it is very rarely seen in valve annulus. Echocardiography has become the procedure of choice and the most important diagnostic tool for non-invasive detection of cardiac tumors and masses. Treatment with all myxomas is surgical excision. Since intracardiac tumors, especially those involving heart valves, carry a significant risk of embolic events, early diagnosis and prompt surgical intervention can significantly reduce the possibility of complications.