belonging to pseudoaneurysm sac around the margin of the cardiac silhouette. Two-dimensional echocardiographic evaluation of the patient revealed that ejection fraction was 55%, and that there was aneurysm formation of the anterolateral wall of the left ventricle interpreted firstly as a ventricular rupture restricted by pericardial sac, and that there was no pericardial effusion. The coronary angiography showed normal coronary arteries. Left ventriculography validated the presence of a pseudoaneurysm. The aneurysm located near the left anterior descending artery was incised firstly, dividing pseudoaneurysm from the left ventricle. The defect was closed the with a circular dacron patch at the base of the pseudoaneurysm. Then the pericardial walls were oversewn.

Conclusions: The diagnosis of the cardiac contusion frequently difficult. Thereby, cardiac evaluation such as echocardiographic assessment should be done as a routine procedure in all case suffering blunt chest trauma. And in patient with left ventricular pseudoaneurysm adjacent to the left anterior descending artery, surgical repair should be performed by endoaneurysmal patch closure technique.

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# PENETRATING CARDIAC INJURIES AND URGENT APPROACH

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Objective: The aim of this clinical study is to asses the characteristics of penetrating heart injuries and its urgent surgical approach.

Methods: Thirteen cases suffering from penetrating heart wounds were evaluated retrospectively in department of cardiovascular surgery between 1999-2004. All of the patients were male. Age ranged from 19-33 years (mean age was 23.1 years).

Results: Five median sternotomy, seven left anterior thoracotomy and one right anterior thoracotomy were performed to control the bleeding or to reach heart for internal cardiac massage (Table 1). Although left atrial penetration was not seen at all, right ventricle penetration was seen in eight patients, left ventricle penetration was seen in two patients and right atrial penetration was seen in three patients. Mortality rate was 23% (three cases).

Conclusions: Although the most important factor effecting mortality rate in penetrating heart injuries is rapid transport, an urgent approach applied by a well trained specialist team decreases the mortality and morbidity rate.

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# REPEATED PARACENTESIS FOR TREATMENT OF RENAL FAILURE AFTER HEART TRANSPLANTATION IN A PATIENT WITH ASCITES

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Objective: We report a case of orthotopic heart transplantation in a 42-yearold man who had cardiomyopathy with severe biventricular heart failure, ascites, and large umbilical hernia.

Methods: The patient was a 42-year-old man weighing 93 kg. He had been previously diagnosed with heart failure four years earlier. After heart transplantation, renal failure was noted. Ascites and renal failure were successfully managed with repeated paracentesis. His cardiac and abdominal symptoms subsided gradually following transplantation. His umbilical hernia was repaired 55 days after the heart transplantation because of strangulation.

Results: Echocardiography showed biventricular dilatation. Left ventricular ejection fraction was 15-18%. Cardiac catheterization was performed. The coronary arteries were found to be normal. Pulmonary vascular resistance was 2.8 Woods/Unit. The donor heart ischemic time was 207 min. No complications were encountered during the surgery. We did not perform an abdominal puncture to drain the ascites. We gave him classic triple immunosupressive therapy. In the postoperative three days, urine output gradually decreased and eventually anuria occurred. During in five days; we ordered some diuretics, dopamine 4 µg/kg/min, but anuria remained. Cyclosporine was stopped. Antithymocyte globulin was started. His abdominal girth increased from 104-109 cm just last in two days. CVP increased from 8-25 mmHg. We added dobutamine and adrenaline due to arterial blood pressure gradually decreased. While preparations were made for hemodialysis, we decided to remove some fluid his abdomen because he had ascites and a dilated abdominal wall. We only removed 3 l of ascites material from

his abdomen within two hours every day. Peritoneal dialysis fluid was not administrated. We replaced his electrolytes, albumin and corrected metabolic defects. Urine output began to increase five (postoperative 10th day) days later and returned to normal levels after eleven (postoperative 16th day) days. He did not require hemodialysis. Creatinine levels decreased to approximately 1-2 mg/dl.

Conclusions: We propose that if the patient suffers from ascites, the ascites can be drained with paracentesis and that it is not necessary to administer any peritoneal dialysis solution. But we have to replace the metabolic and electrolyte deficits. This procedure appears to be safe, simple, and effective.

#### QQ

### COMPLETE ARTERIAL REVASCULARISATION IN PATIENTS OLDER THAN 60 YEARS

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Objective: The aim of this study was to evaluate the early and mid-term results of total arterial myocardial revascularization in patients older than 60 years.

Methods: Sixty-five patients aged 60 years and older (mean 64.8+5.4, range 60-78 years) who underwent total arterial myocardial revascularization between January 2002 and June 2004 were evaluated prospectively. Forty-one patients (63.1%) had three-vessel coronary artery disease, 18 (27.7%) had two-vessel disease and six (9.2%) with left main lesion. Twenty-two patients had an old myocardial infarction (MI) and 11 unstabile angina pectoris. Mean EF was 55%. All patients underwent TAMR. In total 167 distal anastomoses were constructed (2.6 per patient) Pedicled LITA and RITA, free RITA and Radial arter were used as single or composite T- or Y-graft.

Results: Patinent were followed-up in a mean period of 17.6+7.3 months (range 1-28 month). One patient died in this period (1.5%) one underwent PTCA (1.5%) two suffered angina pectoris (3.1%), there was no reoperation in this period. There was no occluded grafts in the early postoperative period (<90 days) patency 100%. Late (mean 16+2 month) LITA patency was 98.1% (one graft occluded), RITA patency was 93.4% (one graft occluded) and RA patency was 93.2% (three grafts occluded).

Conclusions: This study showed that using only arterial conduits in coronary bypass surgery in elderly (patient aged over 60 years) were clearly evident with respect to higher patency rate, surgical reintervention and freedom from cardiac events.

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# POSTTRAUMATIC TRICUSPID LEAFLET PERFORATION AND SUCCESSFUL SURGICAL APPROACH BY TOTAL VALVE AND SUBVALVULAR TISSUES PREVENTION TECHNIQUE

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Objective: Isolated posttraumatic tricuspid valve insufficiency is a rare complication and mostly occurs following a blunt chest trauma. We know that severe blunt chest traumas may cause a range of cardiac injuries varying from simple myocardial contusion to severe damage of cardiac valves and related structures. Clinical presentation of post-traumatic tricuspid valve insufficiency is variable. Clinically significant incompetence of cardiac valves are not common and have been shown in only 5% of the necropsy subjects who died after close traumas to the chest. Structural abnormalities of tricuspid valve and its chordae tendineae and papillary muscles are not rare and these abnormalities of valvachordal anatomy are thought to be related with traumatic lesions and sudden deaths of cardiac origin. We report a case of post traumatic severe tricuspid insufficiency together with an abnormality of subvalvular papillary muscle structure and successful surgical outcome. The patient had multiple anterior tricuspid leaflet perforations after a blunt chest trauma, in combination with abnormal location of papillary muscle of the anterior leaflet of tricuspid valve.

Methods: Implantation of the bioprosthesis was done without making any valve tissue or papillary muscle and chordal resections, in the beating, perfused heart. For this, all the leaflets were left in situ. Interrupted horizantal mattress sutures buttressed with felt pledgets were placed circumferentially and all leaflets were folded by these sutures. Then, a 33 mm Carpentier-