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Conclusions: Classic open aortic surgery for AAA repair can be performed with acceptable risk in Octogenarians. For therapy of ruptured AAA it is not justified to exclude patients from surgery because of their age or preoperative score values.

V1-6

EFFECT OF EVAR WITH TRF AND IRF ON RENAL FUNCTION COMPARED TO OPEN REPAIR: RESULTS OF A PROSPECTIVE COMPARATIVE STUDY

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Objective: Recent studies have shown that progressive renal dysfunction may develop in patients after EVAR, data are conflicting about the effect of EVAR on renal function compared with open repair (OR). The purpose of this prospective study was to assess the effects of EVAR both with TRF and infra-renal fixation (IRF) vs. OR on renal function detected with serum creatinine (SCr), creatinine clearance (CrCl) and renal perfusion scintigraphy (RPS) and to compare them with OR.

Methods: A prospective study was carried out at the Department of Vascular Surgery - University of Padua, from January 2003 to June 2006. To assess renal function a RPS, SCr, CrCl (estimated with the Cockcroft-Gault) were performed preoperatively and in the 4th postoperative day. A postoperative change $\geq 20\%$ of SCr, CrCl or of the glomerular filtration rate (GFR) at the RPS was considered significant for renal dysfunction. The follow-up included: dosage of SCr, CrCl, duplex scan of renal artery and angio-CT at 6, 12 months and then yearly. Patients with a preoperative SCr > 2.5 mg/dl were excluded.

Results: The patients enrolled in the study were 320; 111 underwent EVAR; 57 (51.3%) received a TRF and 54 (48.7%) a IRF; 209 underwent open repair. No significant change were observed for SCr, CrCl from the preoperative to the postoperative period (4th day) in both EVAR groups. A significant reduction of the GFR at the RPS was observed in nine patients (8.1%), 5 (8.8%) from the TRF group and four (7.4%) from the IRF group in absence of relevant variation of SCr and CrCl. In five patients (4.5%; 3 TRF, 2 IRF) the decrease was limited to a single kidney. No difference emerged by comparing preoperative and postoperative SCr and CrCl, between EVAR group and OR. During the follow-up (mean 52 months, range 30-72), a progressive and significant decline of renal function was observed in EVAR group differently in OR group renal function remained stable. No sign of renal artery occlusion or renal infarction was observed at the angio-CT and renal artery duplex scan.

Conclusions: An early decrease of renal function is seen after EVAR at the RPS in 8.8% of patients, regardless of fixation level. Long-term results showed a worsening of renal function in EVAR group respect to OR; this results should be considered in selecting patients with a preoperative renal insufficiency for this procedure.

V1-7

THE ABDOMINAL COMPARTMENT SYNDROME (ACS) AFTER ABDOMINAL AORTIC ANEURYSM (AAA) OPEN REPAIR

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Objective: The abdominal compartment syndrome (ACS) is a 'condition in which increased tissue pressure in a confined anatomic space, causes decreased blood flow leading to ischaemia and dysfunction and leading to permanent impairment of function'.

Methods: Between June 2007 and June 2008 we treated surgically 23 cases of AAA (14 in election and nine in emergency), with indirect intra-abdominal pressure (IAP) monitoring (intra-vesical catheter). Mean age was 68 (64-84) years, 19 males and 4 females. Mean transverse diameter was 6.2 cm (5.5-9.0). Preoperative diagnostic procedure was ultrasound and tomography when possible. All patients were managed in hypotensive hemostasis (restricting fluids and keeping blood pressure around 90 mmHg). Rise in IAP > 20 mmHg was considered for surgical decompression. In one case we registered preoperatively IAP > 20 mmHg treated with only skin suture. No 30-days mortality was occurred.

Results: Is possible to distinguish an acute ACS, secondary to a rapid rise in IAP, and a chronic (compensated by increased abdominal wall compliance). In vascular patients ACS may occur following free intraperitoneal or contained retroperitoneal aneurysm rupture. ACS was defined as 'killer number one' in rAAA treatment. Aggressive ACS treatment has determined

in Mayer experience overall 30-day mortality decreased by two-thirds to 12% in 94 patients treated by emergency EVAR for rAAA and 33% for 107 patients treated by open repair over the past 10 years. Management for patients with raised IAP, or at risk of developing ACS following aortic surgery, is to consider urgent decompression in any patients with IAP over 20 mmHg or at lower pressures associated with worsening organ dysfunction. The rise of IPA > 20 mmHg is the determinant of ACS that may lead to ischemia and dysfunction of the principal organ and system leading to Multi-Organ Failure. Measurement of IAP may be performed directly (intra-abdominal catheter) or indirectly (intra-vesical). All this methods have as objective IPA monitoring before its clinical manifestation. We used intra-vesical catheters for IPA monitoring and in one case it leads to a surgical decompression.

Conclusions: ACS can be a reliable predictive factor for aneurysm outcome. Prevention of ACS, with early recognition of rising IAP and urgent intervention to decompress the tense abdomen can lead to mortality reduction after aneurysm rupture. IAP measurement IAP is simple and non-invasive, and should be a routine component of physiological monitoring in patients after rAAA in association with hypotensive hemostasis.

2nd Vascular Scientific Session - Cerebrovascular Insufficiency 1

May 1, 2009, 2nd Congress Day

11:30-13:00

V2-1

IS THE URGENT CAROTID ENDARTERECTOMY IN PATIENTS WITH ACUTE NEUROLOGICAL SYMPTOMS A SAFE PROCEDURE?

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Objective: The aim of the present case-control study was to assess patients with acute neurological symptoms requiring urgent carotid endarterectomy (CEA) and compare the outcome of the procedure in this group with that achieved in stable patients.

Methods: Twenty-eight CEAs (9.3%) were performed in patients with an acute neurological deficit and 302 in stable patients from December 2006 to April 2008. Those selected for urgent surgery fulfilled the following criteria: acute onset of hemispheric neurological symptoms or crescendo TIAs, significant carotid pathology, the absence of cerebral haemorrhage, uncompromised vigilance, and stable cardiopulmonary conditions.

Results: Perioperative mortality in the stable patients cohort was 0.33%. One patient died during the hospital stay because of myocardial infarction. Perioperative neurological events were observed in 2.2%: one ipsilateral stroke in stage II A, one contralateral stroke in stage I A, and a prolonged neurological deficit with complete restitution at the time of discharge in five patients. No mortality or neurological morbidity was encountered in those who underwent urgent CEA.

Conclusions: Compared to stable patients with stage I, II or IV disease, neither mortality nor morbidity was increased in those who underwent urgent CEA. Urgent CEA after non-disabling stroke or crescendo TIAs is a safe procedure with a favourable outcome.

V2-2

EVERSION CAROTID ENDARTERECTOMY VS. BEST MEDICAL TREATMENT IN SYMPTOMATIC PATIENTS WITH NEAR TOTAL INTERNAL CAROTID ARTERY OCCLUSION: A PROSPECTIVE NON-RANDOMIZED TRIAL

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Objective: To prospectively evaluate clinical effects of eversion carotid endarterectomy (ECEA) vs. best medical treatment of symptomatic patients with near total internal carotid artery occlusion.

Methods: From January 2003 to December 2006 a total of 309 recently (≤ 12 months) symptomatic patients with near total ICA occlusion who were eligible for surgery were identified in our institution. Patients were