Abstract: 3050

Non valvular atrial fibrillation, contraindication to anticoagulation or antiplatelet therapy and heart team approach: a single centre experience

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Introduction: Left atrial appendage is the source of more than 90% of thrombi in patients with atrial fibrillation (AF). Protect-AF and Prevail trials have tested the non inferiority of left appendage percutaneous closure to warfarin for stroke prevention but contraindication to anticoagulation was an exclusion criteria for enrollment. On the surgical side recent studies have shown the efficacy of left appendage exclusion concomitant to open chest cardiac surgery or totally thoracoscopic Maze. In these studies all patients were on anticoagulation or antiplatelet regime at discharge and follow up. Here we give our contribute to the issue of safety and efficacy of stand alone totally thoracoscopic left appendage clipping for non valvular AF related stroke prevention in patients with contraindication to oral anticoagulant or antiplatelet therapy.

Materials and methods: 20 patients with non valvular AF and cerebral hemorrhages (16 males, patients age range 53-87, CHAD-VASC range 4-8, HASBLED range 4-7), underwent stand alone totally thoracoscopic appendage exclusion with a clipping device. All patients, after Heart Team evaluation, were screened preoperatively with 3D CT scan, transesophageal echocardiography and cerebrovascular doppler ultrasound. Intraoperative device positioning and atrial appendage exclusion were guided and confirmed by transesophageal echo. All patients were not on anticoagulation nor antiplatelet therapy from the time of surgery to the control visit. Follow up (range 6-21 months) included outpatient visit, CT scan or TEE. Perioperative mortality and early and late morbidity were analyzed by chart evaluation and full outpatient neurological examination including the Questionnaire for Verifying Stroke Free Status.

Results: Mean duration of surgery "skin to skin" was 62 minutes; all patients were extubated shortly after the procedure. There were no deaths or pulmonary procedure related morbidities, only one case of pericarditis treated with colchicine was documented. On CT or TEE follow up 100% of patients had complete exclusion of the left appendage with residual stumps less than 1 cm and no dislodgement of the clip detected. Freedom from neurological events in all patients was documented in absence of anticoagulation or antiplatelet regime from the time of surgery to the time of the follow up visit.

Conclusion: Totally thoracoscopic left appendage exclusion is a safe, expeditious and effective procedure in preventing non valvular AF related strokes in patients with contraindication to oral anticoagulation or antiplatelet therapy. The efficacy of the procedure is comparable to open chest surgery and this procedure may be considered as valid therapeutic option in patients at high risk of hemorrhage if on anticoagulant or antiplatelet therapy. Clearly further data, longer follow up and possibly an European registry are needed to confirm this preliminary results.