eter (r=0.29, p=0.04), TP-Ea (r=0.37, p=0.004) and GLS (r=-0.57, p<0.0001). On multivariate analysis, after adjustment for age, sex and LV systolic diameter, only TP-Ea (r^2=0.10, p=0.004) and GLS (r^2=0.32, p<0.0001) were independently associated with BNP. Interestingly, for 1% decrease in GLS, BNP raise of 2.6pg/ml. In addition, GLS was an independent predictor of BNP ≥26pg/l (odds-ratio=1.3, 95%CI: 1.05-1.56, p=0.005).

Conclusion: In OMR, BNP release is rather related to LV longitudinal and filling function than severity of MR. Consequently, BNP may be used to unmask subclinical LV dysfunction and to improve the clinical management of patients with OMR.

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Definitive pacemaker requirement after percutaneous Edwards Sapien aortic valve implantation: a rare complication

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In 2009, more than 6000 patients have been treated with percutaneous aortic valve implantation using one of the two commercialized models of bioprothesis. The occurrence of complete atrioventricular block (AV-Block) requiring a pacemaker was described after implantation, particularly with the Corevalve (up to 25%).

Purpose of the Study: To evaluate the occurrence of conduction abnormalities and requirements for permanent pacing after Edwards Sapien aortic valve implantation.

Methods: We analyzed the standard 12-lead electrocardiograms (ECGs) of 55 consecutive Pts in whom an Edwards Sapien aortic valve was successfully implanted between June 2006 and December 2008 using either trans-femoral or trans-apical approach. We examined the ECGs before treatment, at day 1, and at one-month and analyzed the presence of a second or third-degree AV-block.

Results: Mean age was 82 +/- 8.4 years and 46% were female. Logistic Euroscore was 27.8 + 14.9%. We noted a slight increase in HR at day-1 (78.8 + 16 vs 74.9 + 13 b / min, p = 0.005) with decrease in QT interval (395 ± 47.7 vs 416.8 ± 40.2 ms, p = 0.02). These values returned to baseline values at 1 month. There was no change in PR interval (198.8 ± 42.4 vs 199.7 ± 45.7 ms at day 1, p = 0.98 and 199.3 ± 39.8 ms at day 30, p = 0.56) and QRS duration (113.3 ± 26.2 vs 116.8 ± 28 ms at day 1, p = 0.14 and 113.2 ± 25.4 ms at day 30, p = 0.63) neither in the occurrence of hemiblocks. A new left bundle branch developed in 5 Pts (9%) at day one but was not present anymore at day-30. A permanent pacemaker was implanted in 2 cases (4.1%) for 3-degree AV-block: at day 3 one for persistent AV-Block developed immediately after aortic valve predilatation and at day 10 in the second case due to the delayed occurrence of 3-degree AV-Block.

Conclusions: In our experience, conductive disorders and the requirement of a definitive pacemaker after implantation of an Edwards-Sapien bioprothesis are unfrequent (4.1%).

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Incidence and predictors of embolic events during infective endocarditis

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Introduction: Embolic events (EE) are a common complication during infective endocarditis (IE) and are reported to occur in more than 22% of the cases. Literature yields conflicting data about embolism predictors especially regarding the role of echocardiography.

Objective: To determine the incidence of symptomatic EE in IE patients and to evaluate their potential predictors with a specific concern to echocardiography.

Patients and methods: All the cases of IE treated between 1997 and 2006 in a Tunisian high volume tertiary care centre were included. The diagnosis of IE was based on the modified DUKE criteria. Clinical, microbiological, and echocardiographic data were tested as potential predictors of embolism. P values <0.05 were set as a level for statistical significance.

Results: 182 cases of I.E were diagnosed during the study period (109 men and 73 women), the average age was of 35.18±17.72 years; 21 symptomatic EE were recorded, corresponding to an overall incidence of 11.6 %, 10 were embolic cerebral accidents.

On univariate analysis, large vegetations (> 15mm) (28.5% vs 12.7%; p=0.045; RR=4.56), highly mobile vegetations (67.6% vs 34.6%;p=0.032) and staphylococcus species as causative organisms (38.1% vs 18.1%, p=0.038;RR= 2.78) were associated with the occurrence of EE. No differences were found between patients with and without embolisms in terms of age, sex, initial clinical presentation or nature of the valve affected. All the other echocardiographic parameters failed to show any association with EE. By multivariate analysis, no variable independently predicted EE.

Conclusion: Besides staphylococcus species as the causative organisms, vegetations size and mobility are two echocardiographic data that correlated well with the occurrence of EE in IE. A more aggressive namely surgical approach may be warranted in those patients.

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Surgery of chronic functional mitral regurgitation : post operative outcomes and respective results of undersizing annuloplasty and valve replacement

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Background: Dismal prognostic impact of functional mitral regurgitation (MR) in dilated cardiomyopathy has been well established. However, indication of surgery and its modalities (undersizing annuloplastie (UA) vs mitral valve replacement (MVR)) are controversial.

Objectives: 1/Immediate and late post-operative outcomes in patients operated for severe functional MR 2/Analysis of respective result of UA and MVR.

Methods: Inclusion criteria: 1/Symptomatic severe functional MR 2/ Ischemic or non ischemic cardiomyopathy with LVEF<45%. Primary endpoints: 1/In-hospital mortality 2/Late mortality. Secondary endpoints: 1/evolution of LVEF 2/recurrence of MR.

Results: 33 patients(age = 65±10, LVEF = 36 ± 6%, ERO= 41 ± 17 mm^2). Surgery : 11 UA and 22 MVR. No per-operative death. In-hospital mortality: 6% in total population, 9% in UA group, 4.5% in MVR group (p = NS). Late postoperative mortality: 3 years survival: 77% in total population, 88% in UA group and 71% in MVR group (p> 0.99). By multivariable analysis, only age (1.3 [1,1-1,5], p = 0001) and LV end systolic diameter(1.16 [1, 05-1.29], p=0005) independently predicted late mortality whereas type of surgery did not(0.6 [0,1-3,9], p = 0.6). Evolution of the LVEF: LVEF did not change after surgery in the MVR group (36 ± 6% vs 36 ± 7%, p = 0.1) but tended to decrease in the UA group (36 ± 6% vs 30 ± 12%, p = 0.06) MR recurrence: No recurrence in the MVR group whereas 80% recurrence in the UA group (ERO= 21±6 mm^2).

Conclusions: functional MR surgery can be performed with relatively low operative risk, including in most severe patients, and acceptable mid-term result. MVR is a reasonable option with similar early results than UA but without exposing patient to MR recurrence risk particularly high in our series.