required transfusion. There was 1 maternal death from valve thrombosis (in the Enoxaparin-treated group). The incidence of maternal complications was similar between the 2 groups. 2 cases ended in early miscarriage, and 5 cases ended in intrauterine fetal death. The frequencies of fetal complications, live born and healthy babies were similar between the 2 groups.

Regarding the efficacy and safety of antithrombotic treatment in pregnant women with prosthetic heart valves, Enoxaparin treatment during the first trimester is an acceptable regimen. These patients require close surveillance for bleeding and thrombotic complications within a multidisciplinary setting.

**0281**

Mitrail stenosis: implication of metalloproteinase remodelling and calcification

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**Background:** mitral stenosis is characterized by pathological remodelling of valvular tissue but the molecular effectors involved in these processes are not well known. The role of matrix metalloproteinase MMP-9, MMP-3, and tissue inhibitor of matrix metalloproteinase (TIMP)-1 and TIMP-2 are investigated here.

**Subjects and methods:** 235 patients with mitral stenosis and 150 healthy controls were recruited. MMP-9, MMP-3, TIMP-1 and TIMP-2 levels in plasma were measured using an ELISA assay.

**Results:** The plasma concentrations of MMP-3, TIMP-1 were significantly lower in patients compared with control group. MMP-9 rate is significantly increased in patients with mitral stenosis. In men, a negative correlation was observed between calcification degree and rate of MMP-9 (r=0.484, p<0.001) and positive with MMP-3 (r=0.588, p<0.001). In women, positive correlation was found between MMP-9 and mitral area (r=0.387, p=0.002) and also between MMP3 and calcification degree (r=0.603, p<0.001).

**Conclusion:** This study demonstrates the involvement of the MMP/TIMP system in ECM remodelling of stenosis mitral. We have shown a difference in level of MMP-9 between the mitral stenosis and the control. MMP9 was involved in calcification of the mitral valve.

**0319**

Long standing fever in patients with cardiovascular prostheses: role of 18-fluoro deoxyglucose positron computer tomography combined with computerized tomography in diagnosis and management

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**Background:** the diagnosis of infected protheses in patients with long standing fever is difficult, challenging and has major impact on the management.

**Aim:** Since 18-Fluor Deoxyglucose positron emission tomography performed together with computerized tomography (FDG PET-CT) has a role in the diagnosis and localization of infection; we evaluated its value in the diagnosis of infected prostheses, correlating its results with medical workup, echocardiographic and computed CT.

**Patients:** Fourteen patients (pts) with cardiovascular prostheses (seven with a pacemaker, four with vascular grafts, two with pulmonary stent and one with mitral valve prosthesis) were hospitalized for prolonged fever.

**Methods:** All pts received antibiotics and underwent repeated medical workup. Eight of the 14 pts had a proven bacteremia. Transcardiace and transesophageal echocardiogram was performed as well as CT, for most of them.

FDG PET-CT was performed in all of them, following injection of 370 MBq of F-18 FDG. All patients were normoglycemic at the time of injection. Results of the FDG PET-CT were compared with other diagnostic modalities and clinical follow up.

**Results:** In the 7 pts with pacemaker, FDG PET-CT was positive in 4, echo in 2/4, IN 3/4 the device was removed. A new pacemaker was implanted for two patients after few weeks. FEG PET-CT was negative in 3/7 pts with 1 positive, 1 negative and 1 intermediate results. All patients with vascular graft had positive FDG PET-CT scan and only one had a positive echocardiogram. This patient had a surgical proven abscess. Two pts with pulmonary stent had a positive FDG PET-CT scan and 1 positive echo. In this patient the stent extracted was infected. FDG PET-CT and echo was negative in the patient with mitral prosthesis. Conventional CT was positive in only 1 patient. Twelve pts return to normal including all the patients after prosthesis extraction except one who died during graft replacement.

**Conclusion:** FDG PET-CT is a useful tool for the diagnosis of infected cardiovascular prosthesis and is more accurate than stand alone CT. Correlation of the clinical, echo and FDG PET CT findings is crucial for the therapeutic decision.

**0350**

Prevalence and management of cardiovascular diseases in patients with hemophilia

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**Introduction:** The emergence of new therapies based on enhanced prevention and treatment of viral diseases led to a significant improvement in hemophiliacs’ life expectancy. Consequently, they are currently exposed to cardiovascular diseases and candidates for antithrombotic treatments. The benefits of antithrombotic therapy have not been demonstrated for this population and abnormal blood coagulation may also provide a degree of antithrombotic protection. In this study, we aim to assess the prevalence of cardiovascular disease and cardiovascular risk factors in patients with hemophilia, but also collect data concerning the management of these diseases.

**Methods:** This study prospective, observational and monocentric was conducted in a cohort of patients over 50 year old hemophiliacs followed at the Regional Center for Hemophilia Midi Pyrénées. Patients were considered eligible if their cardiovascular risk was moderate to high according to the SCORE scale. A cardiovascular screening was performed including assessment of risk factors and detection of peripheral and coronary atheromatous plaque.

**Results:** 45 patients were enrolled from december 2010 to january 2013, including 22 with minor hemophilia; 15 with moderate hemophilia; and 8 severe hemophiliacs. Monitoring was conducted until January 2014. 47% of the patients (10 patients) had a very high cardiovascular risk. For 21 patients (46.7%), the screening led to change cardiovascular medications or to propose invasive treatment. Anti-thrombotic treatment was prescribed to 11 patients. 3 patients were treated with double platelet anti-aggregation; 7 with single platelet anti-aggregation and 1 patient with Vitamine K antagonists. No major bleedings were reported.

**Conclusion:** The prevalence of cardiovascular risk factors and of cardiovascular disease in patients with hemophilia is not negligible. Based on a personalized approach, antithrombotic therapies might be prescribed without major bleeding complications.