

PROSTHETIC MITRAL VALVE THROMBOSIS

THESIS

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CARDIOTHORACIC SURGERY

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Introduction and Aim of the work

Introduction & Aim of work

The incidence of thromboembolism in currently available prosthetic valves in the mitral position is found to be 5-20% in the first five years after implantation (Edmunds 1997)

This complication has an unfavorable affect on the life expectancy of patients with mechanical valves. The adequacy of warfarin therapy appears to be the most important determinant of the rate of thromboembolism in patients with mechanical replacement devices in the mitral position (Edmunds 1987).

This complication occurs primarily , but not exclusively in patients whom anticoagulant therapy is suboptimal (Lindblom et al. 1987).

Acute thrombotic occlusion of a mitral replacement device is common when the device is a mechanical one (3 per 100 patient-years) and is rare but possible (1.9 per patient-years) when it is a bioprosthesis (Edmunds 1987).

Patients with this catastrophic complication usually become symptomatic only 1 to 3 days before admission and present principally with extreme dyspnea and orthopnea.

The patient may have noticed decrease in the intensity of the prosthetic valve sounds at about the time symptoms began.

Important chest pain is experienced by many. Signs of shock are usually present.

Although incompetence is often present, an apical systolic murmur is rarely heard. Although the fluoroscopic finding of limited disc movement supports the diagnosis, an echocardiogram is diagnostic (Bernal et al. 1976).

Cardiac catheterization usually gives conclusive evidence of mitral obstruction but such patients are usually too ill to withstand this procedure (Copans et al. 1980).

Emergency operation, and not thrombolytic therapy, is indicated (Montero et al. 1989).

This study is designed to stand for the various reasons that contribute in the thrombotic dysfunction of the prosthetic valve that is placed in the mitral position and how to avoid this factor to lower the incidence of this complication and to diagnosis early the presence of valve thrombosis before the deterioration of the hemodynamics of the patient and the decision for operation for replacement in a rather more elective situation to favor the outcome of the operation.