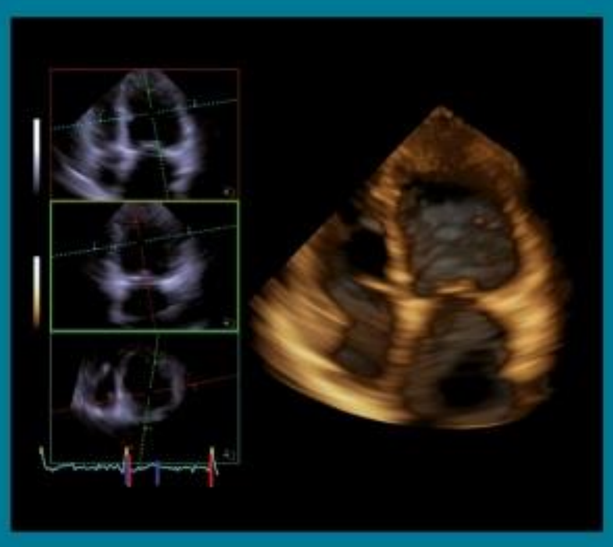

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Sutureless 3F Enable valve in valve implantation for tricuspid bioprosthesis degeneration

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Introduction: The 3f Enable bioprosthesis is a new generation of equine pericardial self-expanding valve designed for sutureless implantation in aortic position. We describe the first implantation of this valve in tricuspid position.

Methods: A 46-year old man was referred for tricuspid bioprosthesis dysfunction (Carpentier Edwards 31). The patient had been already operated on for post-traumatic tricuspid valve regurgiation (1982) and bioprosthesis degeneration (1991). Echocardiographic scanning disclosed: tricuspid prosthesis area < 0,75 cm2 and a mean transvalvular pressure gradient of 12 mmHg. Coronary arteries proved normal at preoperative angiography. A right thoracotomy was performed at the 4° intercostals space, CPB was instituted through femoral vessels cannulation with vacuum drainage. Bioprosthesis leaflet were resected and the sutureless bioprosthesis was implanted with the aid of 3 guiding stitches on a beating heart.

Results: Good position and normal function without paravalvular leakage of the valve were assessed by intraoperative transoesophageal echocardiography immediately after weaning from CPB. Postoperative course was regular. At 12-month follow-up, the patient was asymptomatic without sutureless prosthesis malfunction and without paravalvular leakage. The mean pressure gradient remained stable relative to the discharge value (4 mmHg at discharge, 4 mmHg at 12 months, 3 mmHg at 18 months).

Conclusions: Sutureless valve in valve implantation may be a safe and effective stategy in selected cases of bioprosthesis degeneration.