

P86. Mitral Valve Repair With The New Annuloplasty Ring Memo 3D - preserved Flexibility One Year After Implantation

Steffen Bargenda; Julie Haeggqwist; Esther Palmer; Detlef Roser; Johannes Paula; Nicolas Doll; Joachim-Gerd Rein
Sana Cardiac Surgical Clinic Stuttgart, Stuttgart, Germany

OBJECTIVES: Repair of a regurgitant mitral valve is the preferential treatment commonly supported with an annuloplasty ring. The Nickel-Titanium alloy core of the MEMO 3D semirigid annuloplasty ring promises annulus remodelling with a short a-p distance. We report our clinical and haemodynamic data one year after implantation with special emphasize on the rings' physiological behaviour.

METHODS: Since October 2006 261 patients received mitral valve repair with use of a MEMO 3D annuloplasty ring in our clinic. 109 of them already passed their one year follow-up. Preoperatively 84.4% (n=94) of patients were in NYHA class III and IV. In 52.3% (n=57), additional surgical procedures were performed. Successful valve repair and ring motion was assessed by intraoperative TEE and TTE, before discharge and at one year follow-up.

RESULTS: At one year follow-up 92.7% (n=101/109) patients showed none or mild regurgitation (Grade 0 up to I+). 7 patients (6.4%) were found with moderate and only one with severe regurgitation. 30 day-mortality was 2.3% (n=6), late mortality 2.3% (n=6). All patients who died had preoperatively NYHA functional class IV and III and 7 of them primarily received combined procedures. Three patients (1,15%) required a mitral valve reoperation. All of these reoperations were required for ring dehiscence.

CONCLUSIONS: Mitral valve repair with the new MEMO 3D annuloplasty ring is feasible with low early mortality and morbidity. TEE and MRI demonstrated preserved near physiological ring motion and harmonic adaptation to the annulus. The low rate of mitral valve regurgitation due to a wide coaptation area is evident.