

P78. Video-assisted Minimally Invasive Mitral Valve Surgery Via A Right Minithoracotomy - From An Innovative Approach To Clinical Routine

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OBJECTIVES: The objective of this study was to assess the short-term results after minimally invasive mitral valve surgery via a right minithoracotomy.

METHODS: From 2001 to 2008, 212 patients received minimally invasive mitral valve surgery via a right anterior minithoracotomy (6cm) with endoscopic video-assistance. Mean follow-up was 92±38 days. It included transthoracic echocardiography to assess postoperative valve function and an interview with regard to New York Heart Association (NYHA) functional class.

RESULTS: Valve pathology included mitral valve insufficiency in 197 patients (92.9%), mitral valve stenosis in 4 patients (1.9%) and combined mitral valve disease in 11 patients (5.2%). Mean preoperative NYHA functional class was 2.1±0.94. Successful mitral valve repair was achieved in 187 patients (88.2%). 25 patients (11.8%) received a prosthetic valve replacement. Perioperative complications included re-exploration for post-operative bleeding in 7 patients (3.3%), impaired wound healing in 5 patients (2.4%) and acute aortic dissection in 1 patient (0.5%). Mortality at 30 days follow-up was 0.5%. Echocardiography documented no or minimal mitral regurgitation (MR) in 152 patients (77.9%) and MR grade I in 41 patients (21%). 2 patients needed re-operation for recurrent MR ? grade II. At follow-up, 168 patients (86.2%) were in NYHA functional class I and 27 patients were in NYHA class II (13.8%).

CONCLUSIONS: Minimally-invasive mitral valve surgery via a right minithoracotomy is a safe procedure with excellent short term results which allows even complex valve procedures. With careful patient selection, this approach has found its way to clinical routine at our center.