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Preliminary Short-Term Results of a Population of Patients Treated with Mitraclip Therapy: One Center Experience

Authors : Rossana Taravella, Gilberto M. Cellura, Giuseppe Cirrincione, Salvatore Asciutto, Marco Caruso, Massimo Benedetto, Renato Ciofalo, Giuliana Pace, Salvatore Novo

Abstract : Objectives: This retrospective analysis sought to evaluate 1-month outcomes and therapy effectiveness of a population of patients treated with MitraClip therapy. We describe in this article the preliminary results of primary effectiveness endpoint. Background: Percutaneous Mitral Repair is being developed to treat severe mitral regurgitation (MR), with increasing real-world cases of functional MR (FMR). In the EVEREST (Endovascular Valve Edge-to-Edge Repair Study)II trial, the percutaneous device showed superior safety but less reduction in MR at 1year. 4-year outcomes from EVEREST II trial showed no difference in the prevalence of moderate-severe and severe MR or mortality at 4years between surgical mitral repair and percutaneous approach. Methods: We analysed retrospectively collected data from one center experience in Italy enrolled from January 2011 to December 2016. The study included 62 patients [mean age 74±11years, 43 men (69%)] with MR of at least grade3+. Most of the patients had functional MR, were in New York Heart Association (NYHA) functional class III or IV, with a large portion (78%) of mild-to-moderate Tricuspid Regurgitation (TR). One or more clips were implanted in 67 procedures (62 patients). Results and Conclusions: Severity of MR was reduced in all successfully treated patients,54(90%) were discharged with MR≤2+ (primary effectiveness endpoint). Clinical 1-month follow-up data showed an improvement in NYHA functional class (42 patients (70%) in NYHA class I-II). 60 of 62 (97 %) successfully treated patients were free from death and mitral valve surgery at 1-month follow-up. MitraClip therapy reduces functional MR with acute MR reduction to <2+ in the great majority of patients, with a large freedom from death, surgery or recurrent MR in a great portion of patients.

Keywords : MitraClip, mitral regurgitation, heart valves, catheter-based therapy
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