Abstract:  

Background: The introduction of new percutaneous therapies in the management of severe mitral regurgitation has shown improvement in the quality of life and decrease in mortality. We show our clinical experience in Mitraclip implantation at the Shaio Clinic.

Methods: This is a retrospective and descriptive study from January 2016 to March 2019 that included adults with medically treated heart failure, moderate to severe or severe symptomatic functional mitral regurgitation that were not deemed good surgical candidates.

Results: 64 patients were evaluated, 23 were eligible for Mitraclip implantation. Out of the eligible, the average age was 69 years, 56.5% were male, 17% of them belonged to the functional class NYHA (New York Heart Association) IV, and the average left ventricular ejection fraction was 23%. 91.3% had severe mitral regurgitation (100% functional etiology). Average tenting height (or coaptation height) was 12.7mm with coaptation surface of 3.74mm and posterior leaflet length of 11.8mm. Average valve area and mitral annulus were 6.45cm² and 36mm respectively. There was no difference in echocardiographic criteria between eligible and non-eligible patients for Mitraclip implantation.

23 patients underwent Mitraclip implantation, 86.96% out of these showed residual mild mitral regurgitation, 8.7% exhibited moderate and 4.35% severe.

41 patients did not meet criteria for Mitraclip implantation. 50% of the patients did not have optimal medical treatment, 15.9% of the patients were not deemed good candidates for intervention due to anatomy, 13.1% of the patients underwent surgical procedure, 5.26% had intracavitary thrombus or prosthetic heart valve and 2.63% of the patients were excluded due to mild to moderate mitral regurgitation, administrative issues, death or poor echocardiographic window.

Conclusion: MitraClip implantation is a well-established therapeutic alternative for patients with moderate to severe or severe mitral regurgitation and advanced heart failure. Our positive results are attributed to appropriate patient selection based on clinical and echocardiography criteria.