

Background: Surgical septal myectomy has been considered the gold-standard therapeutic option for symptomatic drug refractory patients with hypertrophic obstructive cardiomyopathy for over 50 years. However, it is being challenged by less- invasive interventional tools in the last 2 decades. Unavailable surgical expertise was one of the major reasons to adopt alcohol septal ablation in many centers.

Objectives: we sought to evaluate early and late outcome of the cumulative surgical experience in managing Egyptian HOCM patients in our center, also to know whether Egyptian patients population has peculiar characteristics or not.

Patients & Methods: In this historical and prospective cohort study, 33 consecutive patients underwent trans-aortic septal myectomy by one surgeon in our center from January 2000 to December 2013. Pre-operative and operative data were collected and analyzed statistically. Post-operative evaluation was documented at different periods and data collected and analyzed in comparison with pre-operative data as well as at these different follow up periods.

Results: Mean age was 29.4 ± 16.8 , with one third of patients younger than 18 years, and 58% males. All patients suffered from dyspnea FC **III, IV** (mean 3.1 ± 0.3) despite maximally tolerated medication. Family history of HCM was positive in 27% and 51% were considered to be at high risk of SCD. Pre-operative mean PG was 102.7 ± 26 mmHg, mean SWT was 2.3 ± 0.5 cm, and mean MR degree was 2.1 ± 1.1 . Immediate post-operative assessment showed significant reduction of PG to 17.6 ± 8 mmHg, SWT to 1.4 ± 0.3 cm, and MR degree to 0.4 ± 0.6 . There was also clinically significant improvement in dyspnea FC to a mean of 0.5 ± 0.7 . With 3 deaths over 14 years, freedom from all-cause mortality was 97%, 92% and 70% at 1, 5 & 10 years respectively. All survivors showed sustained clinical and echocardiographic improvements without recurrence of obstruction.

Conclusion: Septal myectomy can be performed safely with excellent early and late outcome. HOCM Egyptian patients in this study were younger and with higher gradient compared to others.