

Transcatheter septal ablation in hypertrophic obstructive cardiomyopathy: a technical guide and review of published results.

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Abstract

Transcatheter alcohol septal ablation (ASA) treatment of symptomatic patients with hypertrophic obstructive cardiomyopathy (HOCM) is based on the existence and degree of intraventricular obstruction. Patients with significant gradient and symptoms who do not respond to optimal medical therapy are eligible to gradient reduction through a surgical (septal myectomy) or a transcatheter (alcohol septal ablation) septal reduction. The latter encompasses occlusion of a septal branch perfusing the hypertrophied septum, which is involved in the generation of obstruction, by injecting ethanol into the supplying septal branch(es). ASA has been established as a highly effective and safe method and has outnumbered the surgical gold standard. Although the technique is straightforward, patient selection and some technical details may influence the efficacy and safety of the procedure. The technique is based on echocardiographic contrast guidance, which allows accurate target septal branch selection and optimisation of the result. Published long-term results from high-volume centres have confirmed the effectiveness of ASA and have shown excellent survival, which is comparable to that in the general population. Choice and performance of the surgical or interventional treatment should be implemented in highly specialised centres in terms of a heart-team approach, taking notice of anatomic characteristics as well as comorbidities. Involvement of all cases in international registries may reveal the individual merits and indications for the surgical and interventional treatment in HOCM.