

Septal artery embolization (Alcohol septal ablation)

Hypertrophic cardiomyopathy (HCM) is a less common condition that is characterised by left ventricular hypertrophy, i.e. the thickening of the myocardial wall (the heart muscle) corresponding to the left ventricle.

In the majority of cases we are dealing with the thickening of the interventricular septum (the wall that separates the two ventricles). The majority of people suffering from this condition have a normal lifespan and a good quality of life. Many of the cases of hypertrophic cardiomyopathy are discovered randomly, during a routine check-up. Other patients display respiratory problems, palpitations, dizziness, syncope, chest pressure or pain.

Some of the causes of this disease include untreated arterial hypertension and aortic stenosis, but, in general, it is a condition with unknown causes. Moreover, 50% of the cases are caused by a genetic predisposition.

There are various methods of treatment, from medicine to surgical intervention; however, for some patients, alcohol septal ablation (septal artery embolization) is the recommended treatment. This intervention is an alternative to the surgical procedure (myomectomy); it is performed under local anaesthesia and the hospitalisation period only lasts a few days.

The procedure involves injecting a small quantity of alcohol in one of the branches of the left coronary artery that irrigates the hypertrophic myocardial segment. Thus, we produce a controlled infarction that makes the muscle thinner and reduces the obstruction.

Usually, approximately 80% of the patients feel a significant improvement of their quality of life, whereas 10% of the patients need a pacemaker implant after the alcohol septal ablation.