# RadioFrequency (RF) ablation for Hypertrophic Obstructive Cardiomyopathy (HOCM)

Hypertrophic cardiomyopathy (HCM) is a condition where the heart muscle becomes thickened. Although HCM is a relatively rare heart disease, it is the commonest of the cardiomyopathies, affecting 1 in every 500 people. The location of the thickened heart muscle within the heart can vary, but tends to accumulate around the exit of the heart in the left ventricle. This can cause 'obstruction' to blood flowing to the body, and can result in debilitating symptoms of breathlessness, chest pain and fatigue.



# **Alternative Treatment options:**

Medications: Effective in relieving symptoms of breathlessness and chest pain for the majority.

Alcohol ablation: Impossible in some circumstances, upto 5-10% cannot have this procedure.

**Myectomy:** Surgery carries some risk and has a prolonged rehabilitation period. Generally outcomes are very good. Your cardiologist will discuss all of these options with you before considering RF ablation.

# **Radiofrequency ablation:**

Radiofrequency ablation is a procedure designed to deliver low voltage, high frequency electricity to the heart. This creates heat and burns heart muscle. RF ablation is used in most people to burn tissue causing abnormal electricity in the heart. In your case it will be used to burn very thick heart muscle at the exit point from your heart, this will prevent this muscle from contracting and obstructing blood flow.

### The procedure, what to expect.....

The procedure will be performed under general anaesthetic, you will be asleep. Plastic tubes (catheters) will be passed from your groin in arteries and veins to access the heart. We will be using intra-cardiac echocardiography to guide the procedure (see separate information sheet). A series of 'burns' will be performed through these catheters. The procedure will last approximately 2 hours. You will be cared for on the coronary care unit (CCU) after your procedure. Hospital stay will normally be 3-5 days.

### **Risk of complication**

It is difficult to predict the exact risk of complication as this is a relatively new application of RF ablation. We can take comparisons from the patients undergoing very similar procedures and the small number that have had RF ablation for HOCM.

The risk of needing a permanent pacemaker following the procedure is 5-10% (the risk with alcohol ablation is 15%). The risk of causing stroke during a similar procedure is 1%. This was observed in patients who were more unwell than you, and has not happened to those undergoing RF ablation for HOCM. The risk of perforating the wall of the heart with the plastic tubes is 1%, this may require further treatment. The risk of causing damage to the blood vessels in the groin is 1%. Complications from the anaesthetic are rare, allergy, nerve damage or death occurs in less than 1 in 10,000.