

## AORTIC STENOSIS

### **What is it?**

The heart has a series of one-way valves that encourage the blood to flow in the correct direction when it contracts. The main outlet valve is called the Aortic valve. It opens to allow the blood to be expelled from the pumping chamber into the main blood vessel the Aorta and onto the vital organs. Stenosis or narrowing, occurs when the valve fails to open adequately leading to a reduction in the output of blood from the heart and a build up of pressure within the heart.

### **What causes it?**

Valve stenosis can occur when a normal valve is subjected to excessive wear and tear as may occur with advanced age in the 70's and 80's. It may also occur at a younger age when the valve is structurally abnormal. The Aortic valve can be abnormal from birth when it has only two opening components instead of three, or be damaged by rheumatic fever sustained in earlier life.

### **What are the risks?**

Narrowing of the valve leads to reduced output from the heart. This leads to reduced energy levels, chest pain, dizziness and even blackouts. A build up of pressure within the heart leads to congestion within the lungs and shortness of breath.

### **How do you treat it?**

If suitable, open heart surgery is the best treatment to remove the narrowed valve and replace it with a new "artificial" prosthetic valve. There are two types of valve, mechanical or tissue. Mechanical valves are made from Carbon pyrolite and have the advantage of lasting for many years but require life long blood thinning with Warfarin tablets. Tissue valves have the advantage of often not needing blood thinners but tend to not last quite as long.