ATRIAL FLUTTER
Patient Information Booklet
Atrial Flutter is an abnormal heart rhythm within the upper pumping chambers of the heart (left and right atria) and falls into the category of supra ventricular tachycardia (fast rhythms in the upper chambers of the heart). This rhythm may occur in individuals with or without other forms of cardiovascular disease. Atrial flutter is not considered to be a dangerous rhythm disorder but it can sometimes cause stroke as a result of blood clots forming within the heart chamber and, very rarely, atrial flutter can cause loss of heart function (heart failure).

Atrial flutter is closely associated with another rhythm disorder called atrial fibrillation. Many patients suffer both atrial flutter and atrial fibrillation at different times and the symptoms may seem identical to the patient.

Atrial flutter is typically initiated by a premature electrical impulse arising in the atria. These premature impulses are sometimes called ectopic beats and may be felt as a skipped beat by the patient. The electrical impulse circles the right atrium, in a loop, through the so-called ‘cavo tricuspid isthmus’. The cavo tricuspid isthmus (CTI) is a bridge of tissue in the lower part of the right atrium, between the inferior vena cava and the tricuspid valve.

Atrial flutter is divided into two subtypes known as ‘counter clockwise’ and ‘clockwise’ flutter, depending on the direction of current passing through the loop. Very rarely, atrial flutter may not use this pathway and even more rarely, atrial flutter can be caused by abnormal short circuits in the left atrium.

Some individuals describe a ‘fluttery feeling’ in the chest. For some it results in characteristic sensations of regular palpitation. Other symptoms can also include shortness of breath, fatigue, chest pain, light headedness and nausea. However in many cases atrial flutter can go unnoticed because of a lack of symptoms.
CTI ABLATION

CTI Ablation is a treatment procedure for atrial flutter. This procedure is performed in the catheterization laboratory (cath lab). The aim of this procedure is to deploy a ridge of scar tissue in the pathway of the electrical circuit which works similarly to a fire break.

The procedure is performed by introducing cardiac catheters through the right femoral vein at the patient’s groin and into the right atrium. Radio frequency energy is then delivered through the ablation catheter to create lesions to block the pathway of the abnormal electrical circuit causing the arrhythmia.

The successful ablation of the CTI will prevent the recurrence of atrial flutter. The major goal of this procedure is to restore sinus rhythm (normal heart rhythm) without the need for medications, and to relieve symptoms associated with atrial flutter.

An ablation catheter lying on the cavo tricuspid isthmus (CTI)
BEFORE THE PROCEDURE

After a consultation with Professor Weerasooriya, the patient may be asked to have some blood tests done.

During the procedure the patient will be under a general anaesthetic. The patient will have the opportunity to speak with the anaesthetist prior to the procedure, as the level of anaesthesia required can be individualised according to the patient’s requirements.

The patient will be asked not to eat or drink for 6 hours prior to the procedure.

DAY OF THE PROCEDURE

The patient will be admitted to hospital and will be asked to change into a surgical gown in preparation for the procedure. A Patient Service Assistant (PSA) will wheel the patient to the cath lab where the procedure will take place.

They will then be introduced to the team of medical staff who will care for them during the procedure including Professor Weerasooriya, a specialist anaesthetist, an anaesthetic technician, a radiographer (who assists the cardiologist with the use of x-ray equipment), a nurse, an assistant physician and a cardiac technician.

During the procedure a team approach is required. Technicians and the assisting physician help to interpret and record electrical signals from the patient’s heart. The specialist anaesthetist and anaesthetic technician keep the patient comfortable, and the other nurses assist Professor Weerasooriya.

The procedure takes 1-2 hours.

DISCHARGE FROM HOSPITAL AND POST OPERATIVE CARE

Typically the patient is returned to the cardiac ward after the procedure and is expected to be walking within 5 hours. Most patients are discharged from hospital the following day.

It is important to rest for 2-3 days following the ablation. Exercise should then be gradually re-commenced after the first week.
RISKS ASSOCIATED WITH CTI ABLATION

CTI ablation is a low risk procedure. The most common problem is pain and bruising at the site of the groin which will usually disappear after 4-6 weeks without treatment. If oozing, swelling or pain of the groin site occurs, please contact Professor Weerasooriya.

However, as with any procedure complications can occur. These can be summarised as follows:

- Bleeding into the pericardial sac surrounding the heart (cardiac tamponade)
- Pulmonary embolism – blood clot to the lungs
- Death (1 in 5000 cases)