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Central London Consulting Rooms:
London Bridge Hospital
Cromwell Hospital
London Independent Hospital

NHS:
King's College Hospital

Outer London Consulting Rooms:
Blackheath Hospital
Chelsfield Park Hospital
Shirley Oaks Hospital
Sloane Hospital

INFORMATION FOR PATIENTS UNDERGOING RADIOFREQUENCY ABLATION

Your heart is run by electrical signals. Many heart rhythm problems are caused by an abnormality in the electrical circuitry, an extra wire for instance. In many cases the problem can be cured by burning or cauterising this area.

IMPORTANT

- **If you are taking warfarin we will need to ensure that your INR (a measure of your blood's thinness) has been well controlled prior to the procedure. We will also need to control it for the procedure. Please arrange to have your INR checked 5 days before your procedure. Phone us on that day so that we can advise you whether to stop the warfarin. If this coincides with a weekend, phone us at the earliest opportunity. Please have your yellow book to hand when you phone. You MUST tell us if you are taking warfarin for an artificial heart valve or a recent clot in the leg (deep vein thrombosis /DVT) or on the lung (pulmonary embolus /PE).**

- **We may need you to stop some of your medication to allow us to perform the ablation. These might include anti-arrhythmic drugs (e.g. amiodarone, disopyramide, verapamil, diltiazem, flecainide, propafenone, mexiletine, quinidine, procainamide) or beta-blockers (e.g. atenolol, sotalol, metoprolol, bisoprolol, pindalol, nadolol, acebutalol, celiprolol, carvedilol). If you are taking one of the above please call us 5 days before your admission so that we can advise you what to do.**

- **Please take all of your other tablets on the day of your admission and bring them with you.**

- **If there is any chance that you may be pregnant please let us know.**

- **If you are taking antibiotics on the days leading up to your procedure, please let us know so that we can advise you what to do.**

- **If you are being admitted on the day of your procedure:**
  - **If you are a tablet-controlled diabetic please do NOT take your diabetic medication on the day of your admission. If you are diabetic on insulin please take half your usual dose of Insulin; we will check your blood sugar when you arrive.**
  - **You must not eat or drink for four hours before your procedure.**

Before the procedure you will be asked to shave both groins as the catheters will be inserted into the large veins located in this area. One of the nursing staff will help you if necessary.

The ablation is carried out in one of the Cardiac Catheter Labs. There will always be a nurse available to explain what is happening.

To get the electrical wires, that we will use to diagnose and treat your heart problem, into your heart we pass them through the large veins at the top of your legs or occasionally under your collar bone. The doctor will numb the area with local anaesthetic; this stings at first but soon settles. You will be awake during the procedure but you will not feel the catheters moving inside you. You can have medication, if needed, to help you relax.

When the area is numb the doctor will insert small plastic tubes (sheaths) into the vein through which the catheters (special insulated wires) can be passed. Once the catheters are positioned inside your heart chambers the electrical signals are recorded from various parts of your heart's conduction system. The doctor can use the catheters to make your heart go faster using a special pacemaker to try to start your palpitations. You may be aware that your heart beat has increased. Please tell the nurse if you have any discomfort. You will be closely monitored at all times.

Once the exact cause of palpitations is determined, the doctor will guide the special ablation catheter into position and deliver radiofrequency energy to cauterise (ablate) the area.

You may or may not feel mild chest discomfort during the delivery of radiofrequency energy. Inform your doctor if you experience this. If you experience pain, medications will be given to control this.

All the catheters are removed immediately after the procedure is completed. The doctor will apply pressure to the insertion site for about five minutes to prevent bleeding. Sometimes if blood thinning drugs have been given during the procedure we may need to leave the sheaths behind for an hour or two while your blood thickens up to enable us to remove the tubes safely.

Once you return to the ward you will need to rest in bed for several hours to prevent bleeding from the insertion sites.

Your heart rhythm will be monitored for some hours after the procedure. Some patients can go home on the same day, while others will be monitored overnight; this depends on the procedure and the time of day that it was performed. Your doctor will visit you after the procedure (when all your sedation has worn off), to discuss the results of the procedure.

You will require someone to pick you up from hospital. **You are not allowed to drive for a few days after the ablation; this is a DVLA requirement**. Do take things easy for a few days after you go home to allow things to settle. Discuss when you can return to work with your doctor before you go home.

Your puncture sites should be kept clean and dry. Washing the sites each day in the shower with soap and water is all that is required. You will need to watch for signs of bleeding such as increased pain at the insertion site, a lump, increased bruising or bleeding. If excessive bleeding occurs apply direct, firm pressure with your hand (whilst lying down), call an ambulance and return to hospital. Also observe for signs of infection such as redness, weeping, pus or increased pain. This is uncommon. If it occurs contact your GP for some antibiotics.

Complications
This procedure cannot be performed without some element of risk; you need to understand the possible complications before you sign the consent form. It is important that you understand these are uncommon and unpredictable. The majority of patients have no problems. The possible complications are listed below for your information but will vary depending on the sort of arrhythmia that you suffer:

Groin damage: this occurs in approximately 1 in 500 patients. While putting the wires into the vein in the leg it is possible to damage the vein or other structures. Often this settles on its own but occasionally a small operation is needed to repair the vein.
Pericardial effusion (blood leak around the heart): this occurs in approximately 1 in 500 patients. This may occur during the burning. With some ablations where we need to get to the left-hand side of the heart the risk may be slightly higher. Your doctor will explain if this applies to you. Sometimes the effusion resolves on its own but occasionally a drain is needed; very rarely an operation is needed. If you suffer a blood leak your stay in hospital may be delayed by several days.
Pneumothorax (air leak around the lung): this occurs in approximately 1 in 100 patients if the vein underneath the collar bone is used. It is not a risk otherwise. We always check a chest x-ray after the procedure to look for this complication. Sometimes the air disperses on its own. Occasionally a chest drain is needed which may mean that your hospital stay is prolonged by several days.
Heart block requiring a pacemaker: this is only a risk if the area requiring ablation is very close to the normal wiring in your heart. In this situation the risk is usually around 1 in 100. If a pacemaker is required it will be put in soon after the ablation, perhaps the following day – you may only need to stay in hospital for an extra day or so.
Stroke: this is only a risk if we are ablating on the left-hand side of your heart, if you have atrial fibrillation / atrial flutter and have had insufficient blood thinning or if you have a hole in the heart. The risk is very small indeed.
Pulmonary vein narrowing: if you are having an ablation for atrial fibrillation we sometimes have to ablate around the veins that return blood from the lungs. Sometimes this can cause vein narrowing some months after the procedure, leading to breathlessness. This is rare.

Failure: Perhaps the most common 'complication' is that we either do not find an arrhythmia to ablate, or despite attempting ablation we are unsuccessful in curing the problem. The risks of these occurring vary according to the type of arrhythmia that you have. Your doctor will be able to give you an idea of the risk of this in your case, and in the event of failure will discuss the other treatment options.
Recurrence: In approximately 5-10% of cases the same problem may return after an apparently successful ablation. This is due the site of the problem being damaged rather than destroyed, and recovering over a few weeks or months. Often, if necessary, the ablation procedure can be repeated, and is usually successful second time around.
X-rays:
Your examination and/or treatment involves a period of x-ray scanning that will give you a relatively small x-ray dose. In some cases where we need to do more extensive investigation and treatment, there is a small chance that you will get a skin reddening reaction like sunburn which will fade after a few days. Please ask the radiographer if you require further information.

Items which you should bring with you:
Current tablets/medicines including your yellow warfarin book if you have one, details of your GP, next of kin and one other person (telephone numbers at home and at work), dressing gown, pyjamas/night dress.

You may also need:
Slippers, shaving equipment, mirror, comb/brush, flannel/sponge, towel, clothes for travelling home, change for the phone, reading glasses and hearing aid (if required).

You should not bring:
Television, jewellery (except wedding ring), large amounts of money.

When you come into hospital, further advice will be available from the doctors and nurses.