



## Procedure Information Sheet

### Introduction

Radio frequency ablation (RFA) is a therapeutic procedure to treat abnormal heart rhythm (arrhythmia). Radio frequency (RF) energy has been used since 1990 to ablate cardiac arrhythmia. This energy is released at the tip of the catheter to local cardiac tissue, causing an injury area of about 5mm x 5mm, within which the conduction property will be lost. The result will be the successful cure of the arrhythmia.

### Indication

A patient suffering from arrhythmia may have palpitation, chest discomfort, dizziness or vertigo, this may result in heart failure. In severe condition, the patient may lose consciousness or have sudden death.

### The Operation / Procedure

1. This invasive procedure is performed under local anesthesia in a cardiac catheterization centre. Patient is alert during the procedure, sedation may be given for calm down purpose.
2. Electrodes are adhered to the chest to monitor the heart rate and rhythm. Blood oxygen monitor through finger tip will be set up. Measurement of blood pressure from the arm will be taken during the examination.
3. Small wounds are made over the groin, under the clavicle or around the neck for access to arteries or veins. Catheters are advanced to the heart under X-ray guidance.
4. At specific sites inside the heart, electric information will be record; then deliver tiny electric current to alter the heart rate and try to trigger arrhythmias.
5. Patient may experience discomfort when the heart is being excited to certain rate; when an induced arrhythmia is persistent, medical staff may use direct current (DC) cardioversion to convert it.
6. RF energy will be delivered to the target site for around 60 seconds via special RF catheter. Patient may experience slight chest discomfort during delivery of energy.
7. After RFA, another EPS will be carried out to confirm the success of the procedure.
8. The duration of the procedure could last from 2 hours to over 5 hours depending on the nature and complexity of the arrhythmia.
9. Patient will be sent to the ward for observation for another 12-24 hours.

### Before the Operation / Procedure

1. Patient may be required to stop some or all of the anti-arrhythmic drugs before the procedure.
2. If patient experience severe symptom during this period (e.g. palpitation or fainting attack), please contact doctor immediately.
3. Patient need to sign a written consent after explanation from doctor.
4. Patient need to undergo investigations like blood tests, electrocardiogram, chest X-ray.
5. Fasting for 4-6 hours is required prior to the procedure.
6. An IV infusion will be set up.
7. Shaving and disinfection near the puncture site may be required.
8. If patient is a female, please provide the last menstrual period (LMP) and avoid pregnancy before the procedure as this procedure involves exposure to radiation.

<p><b>Patient's Label</b>          Patient Name: _____          Hospital No: _____          Episode No: _____</p>
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### After the Operation / Procedure

1. After the procedure, catheters will be removed. The wound site will be compressed to stop bleeding.
2. Nursing staff will check blood pressure, pulse and wound regularly.
3. Bed rest may be necessary for 4 hours. In particular, please do not move or bend the affected limb. Whenever cough or sneeze, please apply pressure on the wound with hand.
4. Should inform nurse if blood oozing is found from the wound site.
5. Patient may resume diet after the procedure as indicated.
6. Usually patient can be discharged 1 day after the procedure.
7. The wound will be inspected and covered with light dressing. Please keep the wound site clean and change dressing if wet. In general, showers are allowed after 2 days.
8. Please avoid vigorous activities (household or exercise) in the first 3 days after the procedure. Bruising around the wound site is common and usually subsides 2-3 weeks later. If notice any signs of infection, increase in swelling or pain over the wound, come back to hospital immediately.

### Risk and Complications

1. The procedure carries certain risks.
2. Major complications account for about 0.1%. These include damage to blood vessels and the heart that might need surgical intervention, and death due to uncontrollable complications.
3. Minor complications (about 4%) include infection and bleeding at puncture site, blockage of blood vessel by clot, and arrhythmia.
4. About 3% of patients may need permanent pacemaker implantation due to damage to the normal conduction pathway.
5. RFA fails (cannot cure arrhythmia) in about 10% of cases.
6. Recurrence of arrhythmia despite a successful RFA is about 3-10%.

### Alternative Treatment / Investigation

Long term anti-arrhythmic medications.

### Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

### Reference

Smart Patient Website by Hospital Authority: Catheter Ablation (4/2019)

<b>Patient's Label</b>
Patient Name: _____
Hospital No: _____
Episode No: _____

Patient's Signature: \_\_\_\_\_ Date: \_\_\_\_\_