

Hosp No. :	HKID No.:
Case No. :	
Name :	
DOB :	M / F
Adm Date :	
Contact No.:	

# Procedure Information Sheet - Subcutaneous Implantable Defibrillator

## 1. Introduction

1.1. Heart rhythm is mainly controlled by the conduction system of the heart. Any abnormality in the conduction system may result in abnormal heart rhythm (arrhythmia). Life-threatening arrhythmias such as ventricular tachycardia (VT) and ventricular fibrillation (VF) cause not only palpitations, dizziness and syncope but also sudden death. Subcutaneous Implantable Defibrillator (S-ICD) is an implantable device used for treatment of VT and VF. It is essentially an implantable defibrillator which consists of a battery-powered generator and an electrode which connects to the generator. As soon as a VT or VF is detected, the S-ICD will automatically try to correct it by defibrillation.

## 2. Importance of Procedure

2.1. It has been proven in various clinical trials that ICD (including S-ICD) is better than the best anti-arrhythmic drugs in prolonging survival among patients with a high risk of sudden cardiac death due to VT or VF. If you refuse this procedure, the result may be detrimental or even fatal. Alternative treatments include implantation of traditional ICD, anti-arrhythmic drugs and catheter ablation.

## 3. Before the Procedure

- 3.1. You may be required to have special tests such as electrophysiology study (EPS), or stop some or all of the anti-arrhythmic drugs before the procedure.
- 3.2. If you experience severe symptom during this period (e.g. palpitation or fainting attack), please seek immediate medical attendance at nearby clinic or Accident & Emergency Department.
- 3.3. You need to sign an informed consent.
- 3.4. You need to undergo investigations like blood tests, electrocardiogram and chest X-ray.
- 3.5. Blood thinning drugs may have to be stopped several days before the procedure.
- 3.6. An IV infusion will be set up and you need to fast for 4-6 hours.
- 3.7. Shaving near the implant site may be required.
- 3.8. If you are a female, please provide your last menstrual period (LMP) and avoid pregnancy before the procedure as this procedure involves exposure to radiation.

## 4. The Procedure

- 4.1. This invasive procedure is usually performed under general anesthesia or monitored anaesthesia care (MAC) in a cardiac catheterization centre.
- 4.2. Electrodes are adhered to the chest to monitor the heart rate and rhythm. Blood oxygen monitor through your finger tip will be set up. Measurement of blood pressure from your arm will be taken during the examination.
- 4.3. Skin disinfection will be performed and a small skin incision (about 6 cm long) will be made under your left side of rib cage.
- 4.4. Two small incisions are made close to the breastbone allowing placement of the subcutaneous electrode under the skin.
- 4.5. The generator will be connected with the electrode and implanted in a pocket created under the skin or muscle.
- 4.6. VF may be induced under sedation for testing the proper functioning of the S-ICD.
- 4.7. The wound will be closed with suturing material and covered with pressure dressing.
- 4.8. The procedure usually takes around 2 to 3 hours.

## 5. After the Procedure

- 5.1. After the procedure, you will be kept on close monitoring in the ward.
- 5.2. Nursing staff will check your pulse and wound regularly.
- 5.3. You should inform your nurse if you find blood oozing from the wound site.





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- 9.4. Zipes, D.P., Cam, A.J., Borggrefe, M., et al. (2006). ACC/AHA/ESC 2006 Guidelines for Management of Patients with Ventricular Arrhythmias and the Prevention of Sudden Cardiac Death. J Am Coll Cardiol September 5, 2006:e247-e346.
- 9.5. Hospital Authority (2016). Smart Patient. Retrieved from:  
<http://www21.ha.org.hk/smartpatient/SPW/en-US/Home/>

I, \_\_\_\_\_ acknowledged that the above information concerning the operation or procedure has been explained by Dr \_\_\_\_\_. I have also been given the opportunity to ask questions and received adequate explanations concerning the condition and treatment plan.

Name: \_\_\_\_\_

Patient No.: \_\_\_\_\_

Case No.: \_\_\_\_\_

Sex / Age: \_\_\_\_\_

Unit Bed No.: \_\_\_\_\_

Case Reg. Date & Time: \_\_\_\_\_

Patient Signature: \_\_\_\_\_

Patient Name: \_\_\_\_\_

Date: \_\_\_\_\_

