



Procedure Information Sheet

Introduction

Pulmonic stenosis is the narrowing of the pulmonic valve. It is usually congenital. In severe cases, it will cause heart failure and malignant arrhythmias. Percutaneous pulmonic valvuloplasty (PPV) is used to expand narrowed pulmonic valve by special balloons. It is performed under the guidance of X-ray, through percutaneous method. PPV is a catheter-based treatment for pulmonic stenosis. Not all patients with pulmonic stenosis are suitable for this procedure. In selected cases, good long-term result can be achieved.

Indication

Pulmonic stenosis resulting from narrowing of the pulmonic valve, causing heart failure and malignant arrhythmias.

The Operation / Procedure

1. This is an invasive procedure that is performed under local anesthesia in a cardiac catheterization centre, usually. Patient is alert during the procedure, but sedation will 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. A small wound is made at the groin for access to arteries or veins. Both groins may be used. Sheaths will be placed inside the arteries and/or veins.
4. Catheters are advanced to the heart. Pressures within the heart are measured. Contrast is injected and films are taken.
5. A catheter mounted with a balloon will be delivered across pulmonic valve and it will be inflated to open up narrowed pulmonic valve. Repeated balloon inflations may be required.
6. Pressures within the heart are measured to ensure success of the procedure.

Before the Operation / Procedure

1. An echocardiogram (ultrasound imaging of heart) will be performed to assess and confirm the anatomy and functional significance of the pulmonic stenosis. Special attention will be taken on the feasibility of the percutaneous approach.
2. Some preliminary tests including electrocardiogram, chest X-ray, blood tests and echocardiograph will be done in ward or clinic. Allergy history will also be checked. These can be performed days before the procedure or on the day of admission.
3. Doctor will explain the procedure together with the possible risks and complications. This information sheet will be provided. Patient will have to sign an informed consent.
4. Blood thinning drugs or Metformin (for diabetes) may have to be stopped several days before the procedure. Drugs such as steroid may be prescribed. Antibiotic may be given as prophylaxis for the procedure.
5. Fasting of 4-6 hours is required prior to the procedure. An intravenous drip will be set up. Shaving may be required over the puncture site.
6. If patient is a female, please provide last menstrual period (LMP) and avoid pregnancy before the procedure as this procedure involves exposure to radiation.

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



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 patient feels any discomfort in particularly chest discomfort or blood oozing is found from the wound site.
5. Once diet is resumed, please take more fluid to help eliminate contrast by passing urine.
6. Please follow instruction for the use of medications.
7. Usually can be discharged 1-3 days after the procedure.
8. 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.
9. 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 any signs of infection, increase in swelling or pain over the wound, please come back to the hospital immediately.
10. Usually doctor has explained the results of the procedure before discharge. Any further questions, discuss with doctor during subsequent follow-up.

Risk and Complications

1. The procedure carries certain risks.
2. Procedure related death or major complications may occur in <5% of the cases.
3. Mild pulmonic regurgitation may occur in the majority of cases, but most of them are not clinically significant.
4. Minor complications include contrast reaction, nausea and wound complications (<5%). Bruising around the wound site is common.

Alternative Treatment / Investigation

Surgical intervention or medical therapy.

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: Percutaneous Balloon Pulmonic Valvuloplasty (4/2019)

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

Patient's Signature: _____ Date: _____