



Procedure Information Sheet

Introduction

Mitral stenosis is one type of chronic rheumatic heart disease. It is due to narrowing of the mitral valve opening resulting from fusion of the mitral commissures. In severe cases, it can cause heart failure, acute pulmonary edema, arrhythmias and stroke. Percutaneous mitral valvuloplasty (PMV) is used to expand narrowed mitral valve by special devices. It is performed under the guidance of X-ray, through percutaneous method. PMV is an alternative treatment method to the conventional mitral valve replacement by open heart surgery. In selected cases, PMV offers good short- and median-term results.

Indication

Mitral stenosis resulting from fusion of the mitral commissures, causing heart failure, acute pulmonary edema, arrhythmias and stroke.

The Operation / Procedure

1. This is an invasive procedure that is performed in a cardiac catheterization centre, usually under local anesthesia.
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 together.
4. The septum separating the left and right atrium is punctured by a special needle under X-ray or echocardiographic guidance. Contrast injection may be required for the procedure.
5. A specially designed device (balloon catheter) is then passed through the septum and positioned across the mitral valve. This is followed by inflation to expand the valve. This maneuver may be repeated for few more times.
6. Echocardiogram (transeosophageal or intracardiac) is performed during the procedure to confirm the procedural result.

Before the Operation / Procedure

1. An echocardiogram (ultrasound imaging of your heart) will be performed to assess and confirm the anatomy and functional significance of the mitral stenosis. Special attention will be taken on the feasibility of the percutaneous approach.
2. Some preliminary tests including electrocardiogram, chest X-ray, and blood tests will be done in ward or clinic. Allergy history will also be checked.
3. Doctor will explain the procedure and its risks, 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. Steroid will be given if there is history of allergy. 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.

Patient's Label

Patient Name: _____

Hospital No: _____

Episode No: _____



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. Diet can usually be resumed.
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. Major complications include cardiac perforation and tamponade (0.5-4%), severe mitral regurgitation (1-4%), emergency mitral valve surgery (0.3-3.3%), stroke (1-2%), death (0.5-1%).
3. Minor complications include contrast reaction, nausea and wound complications (<5%). Bruising around the wound site is common.

Alternative Treatment / Investigation

Mitral valve replacement (with either metallic or tissue prosthesis) by open heart surgery 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 Mitral Valvuloplasty (4/2019)

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|------------------------|
| Patient's Label |
| Patient Name: _____ |
| Hospital No: _____ |
| Episode No: _____ |

Patient's Signature: _____ Date: _____