

Enhanced Follow-up of Heart Valve Surgery Patients In A Specialist Nurse Led Clinic

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Synopsis

- What is it?
- Who is involved & why it was set up
- Setting up the clinic
- The role of the specialist nurse
- Key points for follow up
- Case study

What is it?

- Life long follow up for patients who have undergone heart valve surgery.
- This is done in a clinic run by specialist nurses
- Consultant supervised

Why it started?

- Native valve disease replaced by prosthetic valve disease
- Life long follow up advocated
- Time constraints on surgeons

Royal Brompton Hospital

Who is involved?

- Specialist nurses
- Access to senior medical staff
- Consultant supervised
- Heart Failure Team

Setting up the clinic

- Liaising with other departments

 - Outpatients

 - Echocardiogram Department

 - X-Ray Department

 - IT Department

- Specialist training

Setting up the clinic

■ Parameters

- Symptoms
- Cardiothoracic Ratios
- LVEDD/LVESD
- LV Dysfunction
- Degrees of valve regurgitation/stenosis
- QRS Durations

Heart Valve Clinic

- Runs once a week
- Nurses alternate each week and run it independently
- 8-10 patients seen
- Appointment time – 15-20 minutes
- Currently 418 patients on 6-24 month review
- Referrals

The role of the specialist nurse

- Clinical assessment
 - Physical
 - Symptom history
- Review test results
 - Echocardiogram
 - ECG
 - Chest X-Ray

The role of the specialist nurse

- Current medication review
- Advice on living with an artificial or repaired heart valve
- Secondary prevention advice: smoking cessation, losing weight
- Liaises with SpR regarding acute issues
- Inform GP regarding consultation, findings & actions

Database Information

Royal Brompton & Harefield **NHS**
NHS Trust

VALVE FOLLOW-UP CLINIC

Date of Assessment
(dd) __ (mm) __ (yy) __

Aortic Valve Disease

Degree of aortic stenosis None [] Mild []
 Moderate [] Severe []

Associated aortic regurgitation No [] Yes []

Degree of aortic regurgitation None [] Mild []
 Moderate [] Severe []

Mitral Valve Disease

Degree of mitral stenosis None [] Mild []
 Moderate [] Severe []

Associated mitral regurgitation No [] Yes []

Degree of mitral regurgitation None [] Mild []
 Moderate [] Severe []

Tricuspid Valve Disease

Degree of tricuspid stenosis None [] Mild []
 Moderate [] Severe []

Associated tricuspid regurgitation No [] Yes []

Degree of tricuspid regurgitation None [] Mild []
 Moderate [] Severe []

CXR taken No [] Yes []

Symptoms

NYHA class I [] II []
 III [] IV []

CCS class 0 [] I []
 II [] III []
 IV []

Any history of syncope No [] Yes []

Clinical History

High blood pressure treated with drugs No [] Yes []

Insulin dependent Diabetes Mellitus No [] Yes []

Non-insulin dependent Diabetes Mellitus No [] Yes []

Current smoker of cigarettes No [] Yes []

Ex-smoker of cigarettes No [] Yes []

Hypercholesterolemia treated with drugs No [] Yes []

Documented myocardial infarction No [] Yes []

 If yes, date of last MI (mm:yy) (mm) __ (yy) __

 Prior CABG No [] Yes []

 If yes, date of CABG (mm:yy) (mm) __ (yy) __

 Prior PTCA ± Stent No [] Yes []

 If yes, date of PTCA ± Stent (mm:yy) (mm) __ (yy) __

Other cardiovascular surgery No [] Yes []

 If yes, specify the surgery

 Prior Stroke No [] Yes []

 If yes, date of stroke (mm:yy) (mm) __ (yy) __

Diagnosis of COPD No [] Yes []

≥ 70% stenosis in either carotid artery No [] Yes []

Peripheral vascular disease No [] Yes []

Potential late complications following heart valve surgery

- Structural valve degeneration
- Left or right ventricular failure
- Pulmonary hypertension
- Arrhythmias or conduction abnormalities
- Coronary Artery Disease

Key points for follow-up

- Surgery is the treatment of choice for most heart valve lesions
- Complications can develop a significant time after surgery
- Patients do not routinely receive regular follow up
- Patients do benefit from specialist follow up following heart valve surgery

Patient Case Study

- 68 year old male
- Mitral Valve Repair 2000 – History of rheumatic fever as a child

- Symptoms

Asymptomatic – feels well

- BP - 110/50
- ECG – Atrial fibrillation (chronic)

Patient Case Study

- Chest X-ray – CTR 62% an increase by 1cm from previous year
- Echo – Severe MR, Mod TR, LVIDd 6.5cm
LVIDs 4.3cm

ACTION

Reviewed by consultant:– Underwent a mitral valve replacement (Mosaic stented bio-prosthesis) Sept'08

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