

Destination Healthy Heart:

A ROADMAP TO MANAGING HEART FAILURE



Heart Failure

DUE TO VALVULAR HEART DISEASE NURSE TALKING TIPS SHEET

This Nurse Tip Sheet was developed by AAHFN as resource in facilitating patient education. It provides additional information so that the Nurse can supplement patient teaching with the corresponding Patient Tip Sheet. A list of resources is provided for additional information.

Background:

- Heart failure (HF) can be due to valvular disorders or the cause of valvular disorders
- Any heart valve can have regurgitation (insufficiency/incompetence) or stenosis (narrowing)
- Aortic Stenosis and mitral regurgitation are the most common valvular disorders in the elderly.
- The ejection fraction may or may not be normal with valvular heart disease.

Causes:

- Rheumatic heart disease is a significant cause of valvular heart disease in developing countries.
- Mitral Insufficiency is common in heart failure and can be either acute or chronic
 - Acute: May be due to a disruption of different parts of the valve, either from infective endocarditis or papillary muscle rupture seen in acute myocardial infarction.
 - Chronic: May be from organic or functional causes.
 - Organic causes include intrinsic disease of the valve itself.
 - Functional causes are considered a disease of the left ventricle which can lead to left ventricular dilatation and mitral annular dilation.

Treatment/Prevention:

- Treatment depends on the valve involved, the type of dysfunction, the age of the patient, and co-morbid conditions.
- Functional valvular dysfunction can improve with treatment of heart failure using guideline directed medical therapies
- Cardiac resynchronization therapy (CRT) may improve non-ischemic dilation which occurs in LV dysfunction
- Treatment of valvular heart disease may include surgery (valve repair or replacement), percutaneous intervention, and/or medical therapy. Which option is best depends on the cause of the valvular dysfunction, valvular anatomy, and the degree of LV dysfunction.

Patient teaching:

- Mechanical heart valve replacements require lifelong anti-coagulation
- Atrial fibrillation and/or prophylaxis against endocarditis may become future concerns for the patient with valvular heart disease.
- Medications for heart failure will be individualized and should be taken as prescribed.
- Teach-back method to ensure comprehension of medications, fluid allowance, sodium restriction, activity allowance and what to do when symptoms occur.

For Future Reference:

Nishimura RA, Otto CM, Bonow RO, et al. 2014 AHA/ACC Guideline for the management of patients with valvular heart disease: executive summary. *JACC.* 2014; 63:1-96.

Aguzzino L, Falco A, de Vivo F, et al. Surgical pathology of the mitral valve: gross and histological study of 1288 surgically excised valves. *Int J Cardiol.* 1992; 37: 79-89.

Smith CR, Leon MB, Mack MJ, et al. Transcatheter vs. surgical aortic valve replacement in high risk patients. *N Engl J Med.* 2011; 364: 2187-2198.