Valvular Heart Surgery

The heart has four valves: triscuspid, pulmonic, mitral and aortic. While all are key to normal heart function, the mitral and aortic valves are of primary importance in that they are the valves that let blood flow in and out of the left ventricle (*the heart's main pumping chamber*). Therefore, these two valves have the greatest influence on mortality if they are not functioning properly.

Generally, the first indication of a heart valve disorder is a heart murmur. This is an abnormal sound produced by the flow of blood through a malfunctioning heart valve. Typically, heart valve disorders that cause murmur(s) are diagnosed as one (*or more)* of the following:

- ***Mitral Stenosis*** is a narrowing of the valve opening, most often due to rheumatic fever.
- ***Mitral Insufficiency*** (*i.e. mitral regurgitation*) is the failure of the valve to close properly, thus allowing blood to flow abnormally back into the left atrium.
- ***Mitral Valve Prolapse*** (*MVP*) is a condition in which floppy valve leaflets *(i.e. cusps*) fail to close properly.
- ***Aortic Stenosis*** is a narrowing of the valve opening. The cause can be congenital or acquired. A bicuspid aortic valve (*i.e. only two valve cusps instead of three*) is an example of a congenital condition.
- ***Aortic Insufficiency*** (*i.e. aortic regurgitation*) is the failure of the valve to close properly, thus allowing blood to flow abnormally back into the left ventricle.

Significant valve disease usually requires surgical intervention. It is possible to repair some valves while others need replacement with a prosthetic valve. Prosthetic valves of artificial material, such as metal or carbon, are very durable and can last decades. However, artificial valves require on-going anti-coagulation therapy (*i.e. blood thinners*) to prevent thromboembolic complications (*i.e. blood clots*).

Replacement valves can be made of organic tissues as well (*i.e. pig valve, cadaver valve, bovine pericardium*). They don't last as long as artificial valves (*8-15 years*), but anti-coagulant therapy is not necessary. Anti-coagulation itself adds a level of risk.

Surgical repair (*rather than replacement*) for stenotic valves involves commissurotomy (opening or tight valve, i.e., with a balloon) or valvuloplasty (tightening a loose valve with suture stitches). Many times, mitral stenosis can be relieved by a balloon procedure via catheter. Repair is commonly done for the regurgitant mitral valve, thus avoiding mitral valve replacement. Repaired valves have a better prognosis than replaced valves.

Mortality risk is increased when valve disease is accompanied by such problems as arrhythmias, heart enlargement, and/or compromised heart function.

{Name
Phone Number
E-mail Address
Website Address}

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Ratings for valve replacements generally are as follows:

within 6 months of surgery.....postpone
ages less than 15.....individual consideration
ages 15 - 39.....Table F plus $5 x 20 yrs.
ages 40 - 59.....Table D plus $2.50 x 20 yrs.
ages 60 & over.....Table A plus $2.50 x 20 yrs.

These ratings presume there is no history of arrhythmia, heart enlargement, or decreased heart function. Higher ratings may be given if a tissue valve is used or if multiple valves are replaced. The ultimate rating for those having undergone repairs is based on the significance of the post repair underlying valve disorder and success of repair, but no less than Table B.

Prior issues of "Rx for Success" have addressed many of the heart murmurs referenced above. Please reference the issues on the website.

To get an idea of how a client with a history of Valvular Heart Surgery would be viewed in the underwriting process, feel free to use the attached Ask "Rx" pert underwriter for an informal quote.

Valvular Heart Surgery - Ask "Rx" pert underwriter
(ask our experts)

Producer _____ Phone _____ Fax _____

Client _____ Age/DOB _____ Sex _____

If your client has had valve surgery, please answer the following questions and enclose the most recent echocardiogram.

1. When was the surgery completed? _____ date)

2. Please note type of valve surgery:
   - ☐ Valve replacement
   - ☐ Commissurotomy
   - ☐ Valvuloplasty
   - ☐ Other _____

3. Please check the type(s) of Valve Disorder:
   - ☐ Aortic stenosis
   - ☐ Aortic insufficiency
   - ☐ Mitral valve prolapse
   - ☐ Mitral stenosis
   - ☐ Mitral insufficiency

4. Please note type of valve used if replaced:
   - ☐ prosthetic (mechanical)
   - ☐ tissue (porcine, bovine, cadaver)

5. Have any of the following occurred?

chest pain	☐ yes	☐ no	heart failure	☐ yes	☐ no
palpitations	☐ yes	☐ no	dizziness/fainting	☐ yes	☐ no
trouble breathing	☐ yes	☐ no			

6. Is there a history of any other heart disease in addition to the valve disorder (coronary artery disease, etc.)?
   - ☐ yes, please give details _____
   - ☐ no

7. Is your client on any medications?
   - ☐ yes, please give details _____
   - ☐ no

8. Has your client smoked cigarettes in the last 12 months?
   - ☐ yes
   - ☐ no

9. Does your client have any other major health problems (ex: cancer, etc.)?
   - ☐ yes, please give details _____
   - ☐ no

After reading the Rx for Success on Valvular Heart Surgery, please feel free to use this Ask "Rx" pert underwriter for an informal quote.

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