Harvard Medical School Department of Continuing Education and the Cardiovascular Division of the Department of Medicine, Brigham and Women's Hospital

Cardiology Rounds
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Evaluation of Mitral Valve Regurgitation: Implications for Percutaneous Mitral Valve Repair

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Objectives:

Cardiologists frequently encounter patients with a variety of etiologies for mitral regurgitation (MR). Determining whether surgical intervention is needed and, when it is, its optimal timing, represents an ongoing challenge. This issue of *Cardiology Rounds* describes the etiologies of MR and current echocardiographic techniques to quantitate MR.

Questions: Only one response is correct.

1. Organic mitral regurgitation (MR) is a primary structural abnormality of the valve that prevents competent valve closure. All of the following are causes of organic MR except:
    a. rheumatic valve disease
    b. endocarditis
    c. systemic lupus
    d. dilated cardiomyopathy
    e. degenerative disease

2. On a global basis, the most common cause of MR is:
    a. ischemic heart disease
    b. endocarditis
    c. degenerative mitral valve disease
    d. rheumatic or post-inflammatory mitral valve disease
    e. inferior posterior myocardial infarction

3. Severe MR is a progressive process, which may be associated with:
    a. heart failure
    b. atrial fibrillation
    c. left ventricular dilatation
    d. increased risk of sudden death
    e. All of the above

4. All of the following therapies have been shown to improve functional MR except:
    a. cardiac resynchronization therapy
    b. chronic afterload reduction
    c. oral positive inotropic agent
    d. beta-blockers

5. Mitral valve repair is generally associated with all the following except:
    a. lower risk of endocarditis
    b. less need for anticoagulation
    c. better outcomes with floppy etiologies than ischemic etiologies
    d. freedom from risk of re-operation

6. Factors contributing to the rate of recurrent MR following valve repair include:
    a. site of repair
    b. use of annuloplasty ring
    c. etiology of MR
    d. all of the above

7. The following methods are complementary ways of echocardiographically quantitating the degree of MR, except:
    a. color flow Doppler
    b. pulmonary vein flow
    c. effective regurgitant orifice area
    d. regurgitant fraction
    e. ejection fraction

To receive AMA category 1 credit, you must correctly answer 60% of the test questions.

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