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***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

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