AHA Releases Statement on Sexual Activity and Cardiovascular Disease

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Decreased sexual activity and sexual dysfunction are common in patients with cardiovascular disease (CVD), and can lead to anxiety and depression. The American Heart Association (AHA) has published a scientific statement synthesizing data relevant to sexual activity and heart disease to provide recommendations and to foster communication between physicians and patients about sexual activity.

General Recommendations

Patients with stable CVD who have no or minimal symptoms during routine activities, and who are found on clinical examination to be at low risk of cardiovascular complications, can safely engage in sexual activity. In patients who are at greater risk or in whom risk is unknown, exercise stress testing should be performed. If these patients can exercise at 3 to 5 metabolic equivalents or more without angina, excessive dyspnea, ischemic ST-segment changes, cyanosis, hypotension, or arrhythmia, they can be advised that sexual activity is reasonable. Cardiac rehabilitation and regular exercise can be useful to reduce the risk of cardiovascular complications. Patients with unstable, decompensated, or severe symptomatic CVD, and those who experience cardiovascular symptoms precipitated by sex, should defer sexual activity until their condition is stabilized and optimally managed. Women with CVD should be counseled about the safety and advisability of contraceptive methods and pregnancy, when appropriate.

Disease-Specific Recommendations

CORONARY ARTERY DISEASE

Sexual activity is reasonable in patients with coronary artery disease if they meet one or more of the following criteria: no or mild angina; no cardiac symptoms during mild to moderate physical activity at least one week after uncomplicated myocardial infarction; uncomplicated vascular access site several days after percutaneous coronary intervention for complete coronary revascularization; or a well-healed sternotomy six to eight weeks after standard coronary artery bypass graft surgery or noncoronary open heart surgery. Exercise stress testing can be considered to assess the extent and severity of residual ischemia in patients with incomplete coronary revascularization. Sexual activity should be deferred in patients with unstable or refractory angina until their condition is stabilized and optimally managed.

HEART FAILURE

Sexual activity is reasonable in patients with compensated or mild heart failure. It is not advised for patients with decompensated or advanced heart failure until the condition is stabilized and optimally managed.

VALVULAR HEART DISEASE

Sexual activity is reasonable in patients with mild or moderate valvular heart disease and no or mild symptoms, and in those with normally functioning prosthetic valves, successfully repaired valves, and successful transcatheter valve interventions. Sexual activity is not advised for patients with severe ▶

or significantly symptomatic valvular disease until the condition is stabilized and optimally managed.

ARRHYTHMIAS

Sexual activity is reasonable in patients with arrhythmias if they meet one or more of the following criteria: a well-controlled ventricular rate in patients with atrial fibrillation or atrial flutter; a history of atrioventricular nodal reentry tachycardia, atrioventricular reentry tachycardia, or atrial tachycardia with controlled arrhythmias; implantation of a pacemaker or an internal cardioverter-defibrillator (ICD) for primary prevention; or use of an ICD for secondary prevention in a patient who can tolerate moderate exercise without experiencing ventricular tachycardia or fibrillation, and who does not receive frequent multiple appropriate shocks. Sexual activity should be deferred in patients with atrial fibrillation and a poorly controlled ventricular rate, uncontrolled or symptomatic supraventricular arrhythmias, and spontaneous or exercise-induced ventricular tachycardia until the condition is optimally managed. Patients with an ICD who have received multiple shocks also should defer sexual activity until the arrhythmia is stabilized and optimally managed.

CONGENITAL HEART DISEASE

Sexual activity is reasonable in most patients with congenital heart disease who do not have decompensated or advanced heart failure, severe or significantly symptomatic valvular disease, or uncontrolled arrhythmias.

HYPERTROPHIC CARDIOMYOPATHY

Sexual activity is reasonable in most patients with hypertrophic cardiomyopathy. It should be deferred in patients with severe symptoms until the condition is stabilized.

Cardiovascular Drugs and Sexual Function

Several classes of cardiovascular drugs, including beta blockers and diuretics, are thought to cause erectile dysfunction. However, recent studies have not shown a clear relationship between this condition and many contemporary cardiovascular drugs. Cardiovascular drugs that can improve symptoms and survival should not be withheld because of concerns about their potential effect on sexual function. If a patient who is being treated with a cardiovascular drug reports sexual dysfunction, efforts should be made to assess whether the dysfunction is more likely related to underlying vascular or cardiac disease or psychological factors.

Pharmacotherapy for Sexual Dysfunction

PHOSPHODIESTERASE-5 INHIBITORS

Phosphodiesterase-5 inhibitors are useful in the treatment of erectile dysfunction in patients with stable CVD. However, they should not be used in patients receiving nitrate therapy, and nitrates should not be administered within 24 hours of sildenafil (Viagra) or vardenafil (Levitra), or within 48 hours of tadalafil (Cialis). The safety of these drugs in patients with acute aortic stenosis or hypertrophic cardiomyopathy is not known.

ESTROGEN

Vaginal dryness and pain with sexual intercourse are common in postmenopausal women. Vaginal administration of estrogen can relieve symptoms of vaginal atrophy, and topical estrogen preparations can also be used on the vulva to treat insertional pain. Concerns have been raised that combined estrogen and progesterone therapy may increase cardiovascular risk in women, but trials of estrogen therapy alone did not show any increased risk. Furthermore, systemic absorption of estrogen with vaginal administration is minimal, so topical estrogen therapy is unlikely to pose any cardiac risk in women with CVD.

HERBAL MEDICATIONS

Numerous herbal medications are advertised for the treatment of sexual dysfunction. Some of these may contain drugs such as phosphodiesterase-5 inhibitors (or chemically similar substances), yohimbine, or L-arginine. These substances can interact with cardiovascular medications, have vasoactive or sympathomimetic properties, can elevate or reduce blood pressure, or have been associated with adverse outcomes in patients with coronary artery disease. It may be reasonable to caution patients with CVD about the potential for adverse effects with the use of herbal medications with unknown ingredients that are taken for the treatment of sexual dysfunction.

Psychological Issues and Patient Counseling

Changes in sexual activity after a cardiac event may impair a patient's quality of life, negatively affect psychological health, and strain marital or other intimate relationships. The resulting anxiety and depression may be an important contributing cause of sexual dysfunction, including decreased libido, difficulty with arousal and orgasm, and dyspareunia. Physicians should assess patients with CVD for anxiety and depression, and refer patients and their partners for sexual counseling, if necessary. ■

Answers to This Issue's CME Quiz

Q1. A	**Q5.** C	**Q9.** A
Q2. B	**Q6.** A, B, C, D	**Q10.** C
Q3. A, B, C	**Q7.** B	**Q11.** A, C, D
Q4. D	**Q8.** A, C, D	**Q12.** A