Cardiovascular Disease in Premenopausal Women

1. Are premenopausal women with mild polycystic ovary disease at higher risk of cardiovascular disease because of impaired glucose tolerance?

Question submitted by: Anonymous

Over 70 years ago, Stein and Leventhal published a paper detailing their findings of hirsutism, obesity and polycystic ovaries in seven women. Today, this clinical constellation is known as the Polycystic Ovary Syndrome (PCOS), and is recognized as one of the most common female endocrine disorders, affecting nearly 10% of women of childbearing age. One of the central pathogenetic features of the syndrome is insulin resistance, universally present in patients with PCOS. Not surprisingly then, women with the disorder are at substantial risk for the development of metabolic and cardiovascular abnormalities similar to those that make up the metabolic syndrome, and include hypertension, dyslipidemia and glucose intolerance. As such, the American Diabetes Association recommends that patients with PCOS be screened for type 2 diabetes. While long-term studies of patients with PCOS have not consistently demonstrated an increase in cardiovascular mortality, it seems prudent, given their adverse cardiovascular profile, that patients with PCOS should be considered for aggressive coronary risk reduction therapy with emphasis on weight management, blood pressure control, cholesterol reduction and glucose normalization.

Resources

1. Stein IF, Leventhal ML. Amenorrhea associated with bilateral polycystic ovaries. Am J Obstet Gynecol 1935;29:181-191.
Glueck CJ, Papanna R, Wang P, Goldenberg N, Sieve-Smith L. Incidence and treatment of metabolic syndrome in newly referred women with confirmed polycystic ovarian syndrome. Metabolism 2003;52:908-915.
2. American Diabetes Association. Screening for type 2 diabetes. Diabetes Care 2004;27:Suppl 1:S11-S14.
3. Talbott EO, Zborowskii JV, Boudraux MY. Do women with polycystic ovary syndrome have an increased risk of cardiovascular disease? Review of the evidence. Minerva Ginecol 2004;56:27-39.

Answered by:
Dr. Theodore Fenske

> PCOS is recognized as one of the most common female endocrine disorders, affecting nearly 10 % of women of childbearing age.

Ablation for Paroxysmal Supraventricular Tachycardia PSVT in Young Adults

2. When to refer for ablation of PSVT in a young adults?

Question submitted by: Anonymous

Most people who present with paroxysmal supraventricular tachycardia (PSVT) have AVNRT (AV Nodal Re-entrant Tachycardia) or AVRT (Atrioventricular reciprocating Tachycardia). These tachycardias depend upon AV nodal conduction, and can be terminated by temporarily blocking AV nodal conduction. Some patients with PSVT are at risk of sudden cardiac death, but most of the impact is on quality-of-life, employment, exercise, pregnancy and social life. Attacks of tachycardia are frequently very unpredictable. In Wolff-Parkinson-White (WPW) Syndrome there is about a 2% annual risk of sudden cardiac death. The choice of long-term therapy of PSVT depends on the type of tachyarrhythmia, the frequency and duration of the episodes, symptoms, and associated risks such as heart failure, syncope, and sudden death. We should consider radio-frequency ablation for any patient with symptomatic PSVT in whom long term medical treatment is not effective, tolerated or desired. Because of the risk for sudden death, patients with symptomatic WPW should be referred for consideration of catheter ablation. The best way to manage asymptomatic WPW remains unclear, but probably warrants an opinion from an experienced electrophysiologist.

It is important that such catheter ablation procedures be carried out in experienced centres with an experienced interventional electrophysiologist. We do know that radiofrequency ablation is also cost effective for patients who require long term medical therapy, or who have frequent emergency department visits for their symptoms.

Answered by:
Dr. Wayne Warnica