CLINICAL CAPSULES

Lipoprotein (a) and CV Risk in Women

High levels of lipoprotein (a) are associated with increased cardiovascular risk in healthy women, particularly in those with high levels of LDL cholesterol, according to researchers at Harvard Medical School, Boston.

Dr. Jacqueline Suk Danik and colleagues analyzed data from 27,791 participants in the Women's Health Study, a prospective study of cardiovascular risk in healthy women aged 45 years and older. Blood samples and data on lifestyle and behavioral risk factors were obtained at baseline. Participants were followed up prospectively for 10 years.

First major cardiovascular events occurred in 899 women. Multivariate analysis showed increased cardiovascular risk was linked to high levels of lipoprotein (a), with the association largely attributed to a threshold effect among those with the highest levels (JAMA 2006;296:1363-70).

The adjusted hazard ratio for a cardiovascular event was 1.66 for women with lipoprotein (a) levels in the 90th percentile (at least 65.5 mg/dL) and 1.87 for those in the 95th percentile (at least 83 mg/dL). Although lipoprotein (a) may have clinical importance in select women at high cardiovascular risk, generalized screening is not recommended, Dr. Suk Danik wrote.

Impact of Long QT Syndrome

Factors that predict a high risk of life-threatening events in adolescents with the hereditary long QT syndrome are duration of the QT interval, timing and frequency of recent syncope, and male gender, according to a study by Dr. Jenny B. Hobbs of the University of Rochester (N.Y.) Medical Center and colleagues.

The study included 2,772 patients enrolled in the International Long QT Syndrome Registry who had survived to age 10 years. For inclusion in the study, patients were required to have at least one of the following: QTc of 450 milliseconds or longer, QTc from 420 to 450 milliseconds with syncope before age 10 years, or QTc from 420 to 450 milliseconds plus a long QT syndrome mutation identified on genetic testing.

A total of 81 patients experienced an episode of aborted cardiac arrest, and 54 had sudden cardiac death during the 10 years of follow-up (JAMA 2006;296:1249-54). Nine of the 81 patients who had an aborted cardiac arrest subsequently experienced sudden cardiac death.

Multivariate analysis determined that patients whose QTc interval exceeded 530 milliseconds were more than twice as likely to experience one of these events as were those with shorter intervals.

Syncope significantly contributed to risk of a cardiac event in a time-dependent fashion. The hazard ratio was 2.7 for patients who had one syncopal event in the past 2-10 years and 18.1 for those who had two or more such events in the past 2 years.

The risk associated with male sex also was time dependent. Between the ages of 10 and 12 years, boys had four times the risk of girls, but there were no gender differences after age 13.

The authors also analyzed the effects of β-blocker therapy in these high-risk patients and found a risk reduction of 64% with the drug therapy.

MI Risk Higher in Men With Gout

Men with a history of gouty arthritis have a significantly higher risk of acute myocardial infarction, reported Dr. Eswar Krishnan of the University of Pittsburgh and his associates.

"This study is the first to show that among men with no previous history of coronary artery disease, gouty arthritis is a significant independent correlate of subsequent acute myocardial infarction," the researchers reported.

The results revealed a significantly greater number of acute MI events in men with gout (odds ratio, 1.26) and showed that hyperuricemia is an independent risk factor for acute MI (OR, 1.11).

The findings were from the Multiple Risk Factor Intervention Trial (MRFIT), a randomized controlled trial of 12,866 men with a mean age of 46 years. They were followed prospectively for about 6.5 years. (Arthritis Rheum. 2006;54:2688-96).

To assess the relationship between MI and gout, the researchers used a two-part definition of gout. Participants had to answer "yes"' when asked if they had ever been told by a physician that they had gout and also had to have a uric acid level greater than 7.0 mg/dL on at least four occasions.

This definition was used because obtaining joint fluid samples from all the participants was not within the scope of the trial. "Defining gout has always been a problem," Dr. Krishnan said. "Crystal diagnosis is desirable but almost impossible."

Although researchers have not fully elucidated the pathophysiology of the relationship between gouty arthritis and cardiovascular disease, Dr. Krishnan proposed that the increased inflammation associated with gout and hyperuricemia could lead to increased risk for acute MI.

—From staff reports