Waist-to-Hip Ratio Better Predictor of Cardiovascular Risk

To assess heart risk, a tape measure, not just a scale, may be more helpful. In a study published in August 2007, investigators at the University of Texas Southwestern Medical Center at Dallas found that people with a larger waist-to-hip ratio might be at increased risk for heart disease. The research evaluated the association between different measures of obesity and the prevalence of arterial disease.

Dr. James de Lemos, Associate Professor of Internal Medicine, explained that people with fat around their mid-section have more arteriosclerotic plaque than those with fat around their hips. The risk was the same for both men and women with abdominal fat. Earlier studies that examined the association between obesity and cardiovascular risk reported varied results for overweight subjects who eventually developed fibrous deposits on the heart valves. The effect has the potential to result in the leakage of blood back into the heart. As a result, the heart overworks, and this can cause heart failure and even death. The defect can be identified with an ultrasound test. The only known treatment is surgical valve replacement. A German research team established that users of Permax® were five to seven times more likely to have leaky heart valves than those on other types of Parkinson's medications. Three other dopamine agonists have not been associated with cardiac-valve abnormalities.

(Source: New England Journal of Medicine, 2007;356:29-38.)

Nicotine Replacement Therapy

It is not uncommon for smokers who have been admitted to an intensive care unit (ICU) to receive nicotine replacement therapy in order to prevent withdrawal symptoms of the substance. Symptoms can include cravings, irritability, depression, restlessness, and sleep problems. Nonetheless, despite evidence of the potential effectiveness of using nicotine replacement therapy to improve patient outcomes in the ICU, no study had examined the safety of this treatment.

Researchers performed a retrospective study of patients who were active smokers when they were admitted the ICU. Nicotine replacement therapy was associated with increased hospital mortality in critically ill patients; 20 percent in the nicotine group died, compared with 7 percent of those not in the group. The researchers did not expect the amount of nicotine absorbed during replacement treatment to be large enough to explain the increased death rate.

The study underscored the need for clinicians to be aware of the potential adverse effects of nicotine replacement before initiating treatment in critically ill patients. The authors recommended that clinicians prescribing nicotine replacement in critically ill persons weigh the risks and benefits associated with this therapy.

(Source: Critical Care Medicine, 2007;35:1517-1521.)

Risk Linked to Drug Used During Heart Surgery

Trasylol® (aprotinin, Bayer, Inc.) is given to patients before heart surgery to reduce bleeding and the need for blood transfusions. Surgeons prefer Trasylol® because it provides a cleaner surgical field. In December 2006, researchers found that patients taking the drug experienced an increased risk of kidney problems, heart attack, and stroke.

This prompted the U.S. Food and Drug Administration (F.D.A.) to change the labeling in attempt to limit its use to people undergoing coronary bypass surgery at a high risk of blood loss. The label now specifies that taking this medication increases the risk for renal dysfunction and may increase the need for dialysis in the perioperative period.

An article published in the February 7, 2007 issue of the Journal of the American Medical Association described the findings from an observational study of 4,374 patients (one-third of whom were treated with Trasylol®) scheduled for coronary artery bypass grafting (CABG) surgery. Compared to those receiving no preventive drug therapy and after propensity adjustment, primary patients receiving Trasylol® had a higher risk for dialysis or creatinine increase; myocardial infarction or heart failure; or stroke, encephalopathy or coma.

Critics of the study say the data are flawed because the doctors chose which patients received which medication. Patients who received Trasylol® were most likely undergoing more complicated surgeries than those who were not treated with the medication. Patients who received Trasylol® were five to seven times more likely to have leaky heart valves than those on other types of Parkinson's medications. Three other dopamine agonists have not been associated with cardiac-valve abnormalities.

(Source: New England Journal of Medicine, 2007;356:29-38.)

Drug for Parkinson's Disease May Lead to Heart Valve Damage

Permax® (ergolide, Eli Lilly) is a dopamine agonist and was approved by the U.S. Food and Drug Administration (F.D.A.) in 1988 as an adjunctive therapy with L-dopa for patients with Parkinson's disease (PD). PD is a progressive neurological disorder resulting from the degeneration of neurons in a region of the brain that controls movement. Youniler and described in association with this drug in 2002. In patients with valve regurgitation, the heart valves do not close tightly, allowing blood to flow backward across the valve. Symptoms include shortness of breath, fatigue, and heart palpitations.

In 2003, the F.D.A. asked the manufacturer and its generic counterparts made by Par and Teva to add heart valve damage to the warnings section of the agent's labeling, which was upgraded to a black-box warning in 2006. In March 2007, the F.D.A. asked Eli Lilly to take Permax® off the market following publication of two additional studies in the January 4, 2007, issue of the New England Journal of Medicine, indicating high rates of valve leakage in patients prescribed Permax®.

Italian researchers reported that Permax® generated heart valve abnormalities in as many 25 percent of patients who used the drug in their study; 23 percent of patients who had been taking Permax® developed fibrous deposits on the heart valves. The effect has the potential to result in the leakage of blood back into the heart. As a result, the heart overworks, and this can cause heart failure and even death. The defect can be identified with an ultrasound test. The only known treatment is surgical valve replacement. A German research team established that users of Permax® were five to seven times more likely to have leaky heart valves than those on other types of Parkinson's medications. Three other dopamine agonists have not been associated with cardiac-valve abnormalities.

(Source: New England Journal of Medicine, 2007;356:29-38.)

“"The bad news is that your uncle has been in a coma for two weeks. The good news is that he hasn't had a cigarette in 14 days."