Nicotine Patches Appear Safe for CAD Patients

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NEW ORLEANS — Nicotine patches are safe for use in smokers with known coronary artery disease and stress-induced myocardial ischemia, according to the results of the first-ever randomized, placebo-controlled, multicenter clinical trial to examine this issue.

Nicotine replacement therapy doubles the successful smoking quit rate to about 30%, but many physicians have been reluctant to recommend it for their patients with coronary artery disease (CAD) because nicotine is known to increase heart rate and blood pressure, and can induce vasoconstriction as well, Dr. Monika J. Leja reported at the annual scientific session of the American College of Cardiology.

Dr. Leja and her coinvestigators at the Methodist DeBakey Heart Center in Houston randomized 55 heavy smokers with CAD and a quantified 10% or greater stress-induced myocardial defect on single-photon emission computed tomography (SPECT) to receive either 21-mg nicotine patches or placebo in addition to continuing their usual amount of cigarette smoking. The primary end point of the study was change in total perfusion defect size upon repeat stress SPECT imaging performed at 1 week.

There was no change in the total or ischemic perfusion defect size, compared with baseline, in either group even though plasma nicotine levels in the active-treatment arm jumped from 10.9 to 25.2 ng/mL, Dr. Leja said. After 1 week, patients were encouraged to quit smoking while continuing to use their assigned patches.

Upon SPECT imaging at week 4, the size of the perfusion defects in the nicotine patch group remained unchanged from baseline, although their plasma nicotine levels remained as high as at week 1.

The trial was supported by GlaxoSmithKline Consumer Healthcare. Dr. Leja has no financial relationship to disclose. ■