Poor Compliance With Carrying Nitroglycerin and Aspirin in Patients With Coronary Artery Disease

To the Editor:
Patients with known or suspected coronary artery disease are recommended, as per American Heart Association Guidelines,1 to carry and use aspirin and nitroglycerin at the onset of chest pain. Although the evidence for supplemental oxygen and morphine to manage suspected acute coronary syndrome is in question,2 there is strong evidence for the benefits of timely administration of aspirin and nitroglycerin. Advice to patients with chest pain include immediately chewing nonenteric-coated aspirin; promptly taking nitroglycerin, repeated at 5-minute intervals; and contacting emergency services if chest pain is not relieved by these measures within 15 minutes.

As a quality assurance measure, we prospectively studied sequential patients with known coronary artery disease, each of whom had been previously counseled to carry aspirin and had been prescribed nitroglycerin for use at the onset of chest pain. The setting was a clinic providing primary care to patients in a midsized Alberta city. Thirty-eight consecutive patients with known coronary artery disease (age range: 45 to 90 years; 17 male patients; 21 female patients) were interviewed in the clinic by their primary physicians and clinic nurses over a 3-month period. Among these patients, only 7 (18%) patients carried nitroglycerin. None carried aspirin.

The most commonly stated reason for not carrying nitroglycerin was the inconvenience of carrying sublingual spray bottles. Men most frequently raised this concern, and only 2 of 17 men (11.8%) carried nitroglycerin, whereas 5 of 21 women (23.8%) carried nitroglycerin in their purses.

Given that patients with known coronary artery disease are at high risk of myocardial infarction and that immediate use of aspirin and nitroglycerin can reduce mortality from myocardial infarction, practical measures are needed to improve compliance and immediate access to these medications. Unwillingness to carry sublingual spray nitroglycerin preparations seems particularly problematic among men.

Catherine Horsman, MD
chors@telusplanet.net
Tammy Frederick, RN

Disclosures
The authors have no conflicts of interest to disclose.

References