

Outcomes of patients dismissed from the hospital with non-cardiac chest pain

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The growing number of Americans with cardiovascular disease has caused a heightened sensitivity in the evaluation of chest pain. In a study published in the April issue of *Mayo Clinic Proceedings* researchers reported that patients dismissed from the hospital with noncardiac chest pain continue to experience cardiac events, which may highlight a need for more aggressive cardiovascular risk factor management in this population.

Noncardiac chest pain is defined as a substernal chest pain in the absence of significant epicardial coronary artery stenoses. Noncardiac chest pain is attributed to a variety of disorders, including [gastroesophageal reflux disease](#) (GERD) and esophageal [hypersensitivity](#), panic attack, musculoskeletal pain and microvascular disease (cardiac syndrome).

Researchers identified 320 patients with a diagnosis of noncardiac chest pain to determine the frequency of gastrointestinal (GI) consultations and testing, and to identify the frequency of [cardiac death](#). All patients had a hospital admission diagnosis of unstable angina, subsequent inpatient cardiac evaluation and a dismissal diagnosis of noncardiac chest pain.

The first aim of this study was to determine the frequency of GI consultation and testing. After the initial diagnosis of noncardiac chest pain, 49 percent of patients were re-evaluated in the [Emergency Department](#) and 42 percent underwent repeated cardiology evaluations;

only 15 percent had GI consultations. In regards to GI testing, 38 percent underwent esophagogastroduodenoscopy, 4 percent underwent manometry (13 tests), and 2 percent had pH probes (six probes).

"Patients in this study received few GI consultations and underwent even fewer GI tests. Further study is needed to determine whether patients with noncardiac chest pain would benefit from more frequent GI consultations and more diverse use of GI testing modalities," says Michael Leise, M.D., co-investigator in the Department of [Gastroenterology](#), Mayo Clinic.

The study's second aim was to report on overall mortality, specifically, cardiac death in patients with noncardiac chest pain. Although prognosis for patients with noncardiac chest pain is thought to be favorable, researchers found that previous data to support this view were limited. The total sample in this study did not display a significantly increased frequency of death compared with what would be expected in this community, but a substantial number of cardiac deaths occurred in a noncardiac chest pain population. "We speculate that cardiac death in patients with noncardiac chest pain may relate to overlapping risk factors for GERD and [coronary artery](#) disease, including obesity, obstructive sleep apnea, diabetes mellitus and smoking," says Dr. Leise. Until cardiac death in this population is better understood, it is important to screen for cardiac risk factors such as hypertension, hypercholesterolemia, and diabetes mellitus and aggressively manage these comorbid conditions.

Provided by Mayo Clinic

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