## The Frequency of Gastroesophageal Reflux Disease in Nutcracker Esophagus and the Effect of Acid-Reduction Therapy on the Motor Abnormality

Saleh Mohsen Al Amri, MRCP, ABIM\*

Aim: The purpose of this prospective study is to estimate the frequency of gastroesophageal reflux disease (GERD) among patients with nutcracker esophagus and to assess the effect on the motility after acid-reducing treatment. The study was performed at King Khalid University Hospital, Riyadh, Saudi Arabia between January 1995 and December 1996.

Methods: Patients were included in the study if 1) esophageal manometry showed nutcracker esophagus tracing, 2) ages between 16-75 years, and 3) no prior use of acid suppressing agents or drugs that change esophageal motility a week before. Initially, all patients underwent upper gastrointestinal endoscopy and 24-hour esophageal pH monitoring.

Results: Eleven patients: seven females and four males, mean  $\pm$  (SD) age was 35 (11) years. Mean  $\pm$  (SD) amplitude of the distal esophageal contraction for the whole group before and after treatment were 205  $\pm$  (33.7) and 145.7  $\pm$  (40.5) mmHg respectively (P < 0.001). Gastroesophageal reflux disease was present in eight (72.7%) patients- six females and two males. Esophageal motor abnormalities returned to normal in the majority of patients (85.7%) after 12 weeks of aggressive acid suppressing therapy.

Conclusion: Gastroesophageal reflux disease is frequent among nutcracker patients. High acid suppressing treatment can reverse the motor abnormalities.