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Objective detection of esophagopharyngeal reflux in patients with hoarseness and endoscopic signs of laryngeal inflammation.

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Abstract

GOALS:

We aimed to quantify pharyngeal exposure to gastric contents in patients diagnosed with reflux-related hoarseness and healthy controls using new diagnostic techniques.

BACKGROUND:

Hoarseness with typical signs on laryngoscopy is commonly thought to be caused by esophagopharyngeal reflux. New methods are proposed to assess pharyngeal exposure to gastric contents. They are suggested to measure: (1) liquid or mixed gas-liquid acid and nonacid reflux with impedance pH, (2) aerosolized acid reflux (Dx-pH measuring system), and (3) pepsin in the saliva.

STUDY:

Twenty-one patients with hoarseness and positive laryngoscopy and 10 controls underwent simultaneous impedance pH, Dx-pH monitoring, and saliva pepsin sampling (5 samples in 24 h).

RESULTS:

Of the 21 patients, 10 had impedance pH-detected reflux plus at least 1 other test positive. These patients were more likely to have symptomatic relief after proton pump inhibitor therapy. Three of the 21 patients had all 3 tests positive and 4 had all tests negative. None of the controls had impedance pH-detected reflux. Two controls had a positive Dx-pH "RYAN score" and 1 control had >1 saliva sample positive for pepsin. Only 11% of Dx-pH drops to pH<4, 15% pH drops to pH<5, and 10% of pH drops to pH<5.5 coincided with impedance pH-detected reflux in the esophageal body. Positive pepsin saliva samples were preceded by more reflux events [3 (range, 0 to 10)] in the previous 60 minutes than negative samples [0 (range, 0 to 7)] (P<0.0001).

CONCLUSION:

A subgroup of patients with hoarseness (10/21) had objective detection of the esophagopharyngeal reflux. We propose that these patients are more likely to benefit from further intense antireflux therapy. Detection of pepsin in the saliva may be a useful screening tool in these patients.