Endoscopy Improves the Diagnosis of Chronic Rhinosinusitis

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ABSTRACT

• CRS is one of the most common chronic diseases in the U.S., associated with enormous economic burden and significant impact on patient quality of life.1,2
• Despite its prevalence, definitive clinical diagnostic criterion remain unclear.

The 1997 diagnostic guidelines for sinusitis were based on a complex of 8 major and 6 minor symptom criteria.2 However, reviews showed that patients alone do not correlate well with radiologic evidence of disease.3,4
• In 2007, new guidelines for CRS were published.6 The major and minor symptom categories were simplified into the following:

1. Nasal congestion (anterior, posterior, or both)
2. Facial pain-pressure-fullness
3. Decreased sense of smell
4. Reduced sense of taste
5. Pain with toothache
6. Periorbital pain
7. Sinus headache
8. Nasal obstruction

• Prospective cohort study of 202 adult patients presenting for evaluation of CRS, using RSI, nasal endoscopy, and paranasal sinus CT.

METHODS

• Nasal endoscopy was performed by a single endoscopist who was blinded to symptom scores. Criteria of objective inflammation was met if either purulence or polyps were documented by one of the following:
• Patient was referred for endoscopy in the diagnosis of chronic rhinosinusitis (CRS), using RSI, nasal endoscopy, and paranasal sinus CT.

RESULTS

• Overall prevalence of CRS was 39.6%.
• Percentage of patients reporting positive symptoms for mucopurulent disease was 70.3%.
• Distribution of symptom reporting, endoscopic findings, and final CT diagnosis is presented in Table I.

• Using symptom criteria alone, sensitivity of the diagnostic value of the 2007 CRS diagnostic guideline criteria was 42.8%.

• In the group meeting positive symptom criteria, the addition of endoscopy also significantly increased the PPV and odds ratio of a true diagnosis of CRS (Table I and II).

DISCUSSION

• The 2007 CRS diagnostic guideline criteria simplified the symptom criteria. Objective evidence of middle meatal inflammation was added to hopefully improve diagnostic accuracy.

• This is the first study to systematically examine the diagnostic value of the 2007 adult sinusitis guideline criteria for CRS.

REFERENCES