When Are We Operating For Chronic Rhinosinusitis?
A systematic review of maximal medical therapy protocols prior to endoscopic sinus surgery

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ABSTRACT

Background
Endoscopic surgery is considered a therapeutic option after failure of maximal medical therapy (MMT) for chronic rhinosinusitis (CRS). However, there is currently no consensus on the definition of MMT. The objective of this systematic review is to describe the various MMT criteria employed prior to considering a patient a candidate for ESS.

Methods
A systematic review was performed using the 2009 Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Inclusion criteria were adults (>18 years of age) with CRS based on guideline-directed diagnostic criteria, enrolled to undergo ESS, and study publication within the last 5 years (Jan. 1, 2009 to Dec. 30, 2014). Studies were excluded if the study population included non-CRS indications for ESS. Primary outcome was the MMT criteria employed prior to considering a patient a candidate for ESS. A subgroup analysis was performed evaluating MMT based on polyp status.

Results
Eighty-one of 377 reviewed studies (22%) reported MMT criteria prior to considering ESS. MMT criteria included topical nasal corticosteroids (91% of studies) for a mean of 8 ± 6 weeks, oral antibiotics (89%) for 53 ± 8 days, systemic corticosteroids (61%) for 18 ± 12 days, saline irrigations (36%), oral antihistamines (11%), oral mucolytics (10%), and topical/oral decongestants (10%).

Conclusions
A minority (22%) of studies evaluating CRS explicitly report the MMT criteria used as the indication for ESS. The most common MMT criteria included a 5-week course of topical nasal corticosteroids and 3-week course of oral antibiotics. The use of systemic corticosteroids did not differ based on polyp status. Due to variation in current MMT criteria, there is a need to develop standardized indications for ESS to improve the appropriateness of care for patients with CRS.

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OBJECTIVE

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Table 2. Therapies included in maximal medical therapy criteria (N, number; CI, confidence interval)

Figure 1. Preferred Reporting Items for Systematic Reviews and Meta- Analyses (PRISMA) 2009 flow diagram

REFERENCES