# A Practical Approach to Refractory Chronic Rhinosinusitis



Edward D. McCoul, MD, MPHa, Abtin Tabaee, MDb,\*

#### **KEYWORDS**

Chronic rhinosinusitis
Nasal polyps
Sinus surgery
Topical therapy

#### **KEY POINTS**

- A multidisciplinary and broad approach is required in the diagnostic evaluation of refractory CRS encompassing patient, environmental, and disease-related factors.
- Treatment of refractory CRSwP requires complete polyp removal and establishment of wide sinus openings to facilitate the postoperative delivery of topical corticosteroids.
- Treatment of refractory nonpolypoid CRS involves surgery to maximize sinus ventilation and drainage, using systemic or topical antibiotics or other adjunctive agents to minimize symptoms.
- A variety of emerging diagnostic and treatment pathways will likely improve management of CRS in the near future.

#### INTRODUCTION

As the understanding of chronic rhinosinusitis (CRS) has evolved from a monomorphic "infection" to a group of distinct inflammatory entities<sup>1,2</sup> so too has the approach to clinical evaluation and treatment. The need for an individualized approach to diagnosing and managing the possible variables that may have initiated the condition or spurred its persistence is becoming increasingly evident. This is especially true for individuals with refractory CRS. To elucidate the underlying pathophysiologic factors involved in a given patient, a list of several potential host and initiating events may be identified. Additionally, in patients with refractory CRS, the disease course itself

Disclosure Statement: There are no commercial or financial grant/assistance associated with this publication. Dr E.D. McCoul is a consultant for Acclarent. Dr A. Tabaee is on the scientific advisory board of Spirox.

E-mail address: atabaee@hotmail.com

<sup>&</sup>lt;sup>a</sup> Department of Otorhinolaryngology, Ochsner Clinic Foundation, 1514 Jefferson Hwy, CT-4, New Orleans, LA 70121, USA; <sup>b</sup> Department of Otolaryngology, Weill Cornell Medicine, 1305 York Avenue, 5th Floor, New York, NY 10021, USA

<sup>\*</sup> Corresponding author.

#### **Abbreviations**

AERD Aspirin-exacerbated respiratory disease

CF Cystic fibrosis

CRS Chronic rhinosinusitis

CRSwP Chronic rhinosinusitis with polyposis

may compound the primary infection and contribute to perpetuation of inflammatory injury. Given this dynamic interplay between patient and disease variables, continued investigation and re-diagnosis of the relevant contributing factors is necessary throughout the lifespan of CRS. This article provides a practical approach to diagnostic evaluation and treatment considerations in refractory CRS. Integral to this discussion is an understanding of emerging concepts and future directions.

## DIAGNOSTIC EVALUATION OF REFRACTORY CHRONIC RHINOSINUSITIS General Principles

The approach to the clinical assessment of a patient with refractory CRS differs from that of routine CRS in several ways. The patient's prior history including disease course and treatment response is typically extensive. Additionally, the various etiologic issues may have evolved throughout the CRS history resulting in the emergence of CRS-related factors that may not have been initially present. Examples of this include osteitic bony changes and biofilm-producing bacteria. Therefore, a broad and comprehensive approach to diagnosis is imperative.

#### **Patient History**

Obtaining a complete medical history of a patient with refractory CRS is often timeconsuming and complex. Symptom review encompasses the common sinonasal and related symptoms including nasal congestion, rhinorrhea or postnasal drip, facial pressure or pain, and disturbance in sense of smell or taste. Otologic, pulmonary, and general symptoms (fatigue, malaise, sleep disturbance) may also be present. Severity, duration, change over time, variability, associated modifying factors, and treatment response are assessed. A variety of sinonasal and general quality-of-life measures have been well described and are commonly used in clinical research. Although their role as a diagnostic tool and as an assessment of severity compared with a "normal" population have not been well defined, these tools are sensitive to change in symptom severity in a given individual and therefore have utility to establish a baseline qualityof-life score that can be followed during the course of the disease. The commonly used 22-item Sinonasal Outcome Test addresses multiple domains of sinonasal quality of life including rhinologic symptoms, extranasal rhinologic symptoms, ear/facial symptoms, psychological dysfunction, and sleep dysfunction.<sup>3,4</sup> The following past medical history should be carefully reviewed including the primary medical record whenever possible in addition to the patient's narrative report:

- Prior treatment modalities including a list of medications and surgical interventions with dates, durations, compliance, tolerance, and symptom response.
- Prior objective tests including laboratory tests, imaging studies, pathology results, and culture results. For imaging studies, the radiologist report and actual images should be reviewed.
- The medical records of prior treating otolaryngologists and associated medical specialties. Because most patients with refractory CRS have a prior history of sinus surgery, this also includes prior surgical reports.

### Download English Version:

## https://daneshyari.com/en/article/5715545

Download Persian Version:

https://daneshyari.com/article/5715545

<u>Daneshyari.com</u>