

CHRONIC RINOSINUSIT AND COVID-19

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ABSTRACT: Chronic rhinosinusitis (CRS) is a chronic inflammatory disease of the upper respiratory tract with a wide range of clinical variants. As our understanding of the pathophysiology of the disease develops so does our philosophy regarding the approach and treatment of CRS, endotyping gains an advantage over phenotype-based classifications due to its potential to predict disease severity and provide accurate treatment. Endotyping is particularly useful in complex cases of CRS with a nasal polyp, for which new treatment options such as biologics are now available. The latest European position paper on rhinosinusitis and nasal polyps (EPOS2020) reflects these developments with updated rhinosinusitis classifications and new integrated care schemes.

KEYWORDS: Rhinosinusitis, chronic inflammatory, polyangiitis, primary ciliary dyskinesia, pathophysiology, heterogeneous.

INTRODUCTION

Chronic rhinosinusitis (CRS) is a chronic inflammatory disease with a global social and financial burden endoscopy or imaging is used [3]. Real data show that almost half of patients with CRS have uncontrolled disease based on the visual analog scale for rhinosinusitis [6–8]. This subgroup has a significant disease burden as these patients require long-term follow-up, medical treatment, and frequently repeated sinus surgery. Traditionally, CRS has been classified based on the presence or absence of nasal polyps. Clearly, this visual classification is likely to be an oversimplified representation of a heterogeneous condition with a spectrum of clinical manifestations and severity. Consequently, in recent years there has been an increasing interest in uncovering the inflammatory mechanisms or endotypes of CRS. With the advent of new treatment options, including biological ones, the ability to accurately determine endotypes and

predict response to specific treatments using biomarkers is important for personalized patient care [1]. CRS research is a constantly evolving area. The purpose of this review is to inform readers about recent important developments in the field of CRS in adults. To do this, we searched the literature for studies on the above topics, with a focus on publications in peer-reviewed journals in the last 3 years.

THE MAIN FINDINGS AND RESULTS

The European position paper on rhinosinusitis and nasal polyps is the latest version of the European position paper providing a comprehensive overview of the latest research on rhinosinusitis [2-5]. Several updates have been made to this edition. In the context of this review, the main feature is the proposal of a new classification system for CRC, which is no longer centered around the polyp phenotype. CRS is now first defined as primary or secondary CRS and then classified as localized and diffuse disease, depending on the anatomical distribution of the disease. It then further differentiates into a type 2 or non-type 2 endotype in primary diffuse CRS. Secondary CRS is rightfully a separate category because it is the result of (subtle) immunodeficiency [8] or other rarer conditions such as granulomatosis with polyangiitis, primary ciliary dyskinesia or cystic fibrosis, which are treated very differently from those of primary CRS. Another feature is the introduction of integrated care pathways that are based on this new classification.

CONCLUSION

Significant progress has been made in the field of CRS. EPOS2020 confirms this with a timely update of the classification scheme and integrated care pathways. The emergence of biologics in the arsenal of treatments for CRS is an exciting development, and it is expected that, over time, this will further shape treatment guidelines in the future.

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