

Cystic Fibrosis Research News

Title:

The Negative Impact of Chronic Rhinosinusitis on the Health-Related Quality of Life among Adult Patients with Cystic Fibrosis

Lay Title:

How does chronic rhinosinusitis impact quality of life of cystic fibrosis patients?

Authors:

Daniel J. Lee MD FRCSC¹, Jenna Sykes MMath², Katherine Griffin BA², Christopher W. Noel MD¹, Brian Hyung BHSc¹, Kamalprit Chokar BSc², Christopher MKL Yao MD FRCSC¹, Elizabeth Tullis MD FRCPC^{2,3}, John M. Lee MD MSc FRCSC¹

Affiliations:

¹Department of Otolaryngology – Head and Neck Surgery, St. Michael's Hospital, Unity Health Toronto, University of Toronto, Toronto, ON, Canada

²Adult Cystic Fibrosis Centre, St Michael's Hospital, Unity Health Toronto, Toronto, Ontario, Canada

³Division of Respiriology, Department of Medicine, University of Toronto, Toronto, Ontario, Canada

What was your research question?

- 1) How common is chronic rhinosinusitis (CRS) among cystic fibrosis (CF) patients with confirmed nasal endoscopy findings?
- 2) How does CRS impact CF patients and how do different survey tools compare?

Why is this important?

With medical advances, many CF patients now survive over 50-years of age but live with multiple co-existing conditions, such as CRS. Although CRS is a common condition among CF patients, the burden of CRS on CF patients has not been well described using generic and CF-specific survey tools. Understanding the prevalence and burden of CRS using multiple tools is critical in optimizing the care of CRS among CF patients.

What did you do?

We screened patients for symptoms of CRS. If they had more than two symptoms of CRS, they were referred to Ear, Nose and Throat specialist (Otolaryngologist) for further assessment,

Cystic Fibrosis Research News

such as nasal endoscopy. This allowed us to determine the prevalence of CRS among CF patients. All the patients also completed different surveys related to quality of life.

What did you find?

We found that CRS was a common condition among 195 CF patients with 43% having both symptoms and nasal endoscopy findings. Compared to those without CRS, patients with CRS reported significantly lower quality of life in all survey tools. This was comparable to what was reported for those with lower lung function and CF exacerbations. In addition, the severity of sinus symptoms directly impacted the overall quality of life measurements in all questionnaires.

What does this mean and reasons for caution?

The results of our study show that CRS is a prevalent co-existing condition among CF patients with an adverse impact on their quality of life. This impact is also directly related to the severity of sinus symptoms. However, our study was based on surveys done at one time point rather than over multiple time points. A longitudinal study may allow us to evaluate the dynamic nature of the survey responses over a longer period of time.

What's next?

Our study highlights the importance of diagnosing and managing CRS in the care of CF patients in a multi-disciplinary fashion. Future studies may incorporate assessing quality of life at multiple time points and evaluating the quality of life of patients who are on CFTR modulators.

Original manuscript citation in PubMed

<https://pubmed.ncbi.nlm.nih.gov/35660273/>