Chronic rhinosinusitis is a prevalent medical condition affecting up to 16% of the adult US population. Despite its widespread prevalence, symptoms and co-morbidities are imprecise in predicting the presence and magnitude of objective evidence of sinonasal inflammation compared to objective evidence of disease and symptom-based diagnostic criteria. 1 Facial pain has been shown to be an especially poor predictor of CRS as various other conditions have been shown to cause similar pain such as incarcerated TMJD. 2 Pain catastrophizing was not significantly different in catastrophizing patients. Results: Seventy-five patients were enrolled in the study. Significant positive correlations were found between PCS and HADS, total RSI, and RSI emotional sub-scores (p<0.01). The incidence of objective evidence of disease, as measured via nasal endoscopy and CT, was not significantly different in catastrophizing patients. Conclusion: Pain catastrophizing correlates with anxiety/depression and worse disease-specific QoL in patients meeting symptom criteria for CRS. Otolaryngologists should be aware that catastrophic thinking can intensify a patient’s perception of sinonasal symptoms, and clinicians may consider management of psychological comorbidity to optimize rhinosinus outcomes. Abstract

Chronic rhinosinusitis is a prevalent medical condition affecting up to 16% of the adult US population. Despite its widespread prevalence, symptoms and co-morbidities are imprecise in predicting the presence and magnitude of objective evidence of sinonasal inflammation compared to objective evidence of disease and symptom-based diagnostic criteria. 1 Facial pain has been shown to be an especially poor predictor of CRS as various other conditions have been shown to cause similar pain such as incarcerated TMJD. 2 Pain catastrophizing was not significantly different in catastrophizing patients. Results: Seventy-five patients were enrolled in the study. Significant positive correlations were found between PCS and HADS, total RSI, and RSI emotional sub-scores (p<0.01). The incidence of objective evidence of disease, as measured via nasal endoscopy and CT, was not significantly different in catastrophizing patients. Conclusion: Pain catastrophizing correlates with anxiety/depression and worse disease-specific QoL in patients meeting symptom criteria for CRS. Otolaryngologists should be aware that catastrophic thinking can intensify a patient’s perception of sinonasal symptoms, and clinicians may consider management of psychological comorbidity to optimize rhinosinus outcomes.

Objectives: Psychological comorbidity is common in patients with chronic rhinosinusitis (CRS) and is correlated with decreased overall and disease-specific quality of life (QoL). Prior research noted that anxiety and depression, as measured by the hospital anxiety and depression scale, are associated with worse CRS-specific QoL, as assessed via the RhinoSinusitis Disability Index (RSDI). Furthermore, patients prone to anxiety/depression may elicit an exaggerated response to real or anticipated discomfort; the pain catastrophizing scale (PCS) is a validated instrument designed to measure this phenomenon. This study is intended to explore the role of pain catastrophizing in relation to anxiety, depression, and disease-specific QoL in patients with facial pain attributed to CRS.

Methods:

Diagnosis of presumed CRS was based upon current AAO-HNS guidelines; all participants reported facial pain as the component of their CRS symptomatology. RSI, HADS, and PCS questionnaires were administered upon presentation prior to interventions, and objective and subjective measures of sinonasal outcomes were performed and scored using Lund-Kennedy Scoring system while CT scans (performed after at least 4 weeks of maximal medical therapy) were scored using Lund-Mackay Scoring system.

Results: Seventy-five patients were enrolled in the study. Significant positive correlations were found between PCS and HADS, total RSI, and RSI emotional sub-scores (p<0.01). The incidence of objective evidence of disease, as measured via nasal endoscopy and CT, was not significantly different in catastrophizing patients. Conclusion: Pain catastrophizing correlates with anxiety/depression and worse disease-specific QoL in patients meeting symptom criteria for CRS. Otolaryngologists should be aware that catastrophic thinking can intensify a patient’s perception of sinonasal symptoms, and clinicians may consider management of psychological comorbidity to optimize rhinosinus outcomes.

Introduction

Chronic rhinosinusitis is a prevalent medical condition affecting up to 16% of the adult US population. Despite its widespread prevalence, symptoms and co-morbidities are imprecise in predicting the presence and magnitude of objective evidence of sinonasal inflammation compared to objective evidence of disease and symptom-based diagnostic criteria. 1 Facial pain has been shown to be an especially poor predictor of CRS as various other conditions have been shown to cause similar pain such as incarcerated TMJD. 2 Pain catastrophizing was not significantly different in catastrophizing patients. Results: Seventy-five patients were enrolled in the study. Significant positive correlations were found between PCS and HADS, total RSI, and RSI emotional sub-scores (p<0.01). The incidence of objective evidence of disease, as measured via nasal endoscopy and CT, was not significantly different in catastrophizing patients. Conclusion: Pain catastrophizing correlates with anxiety/depression and worse disease-specific QoL in patients meeting symptom criteria for CRS. Otolaryngologists should be aware that catastrophic thinking can intensify a patient’s perception of sinonasal symptoms, and clinicians may consider management of psychological comorbidity to optimize rhinosinus outcomes.

Results

Objective Evidence of Sinonasal disease, % (±) of patients

- Rhinosinusitis
- Allergic
- Chronic
- Non-allergic
- Unilateral
- Bilateral

Correlation with total PCS

- Total
- Anxiety
- Depression
- RSI

Conclusions

1. Our results demonstrate that pain catastrophizing behavior had a positive correlation with anxiety and depression, which are known to be common in patients with CRS.
2. Patients with CRS reporting facial pain as a cardiac symptom have been found to have worse disease-specific QoL when catastrophizing.
3. Early recognition of catastrophic thinking can help improve QoL by utilizing a multifaceted approach to provide appropriate psychological intervention resulting in decreased subjective levels of pain and disability.

References