Empty Nose Syndrome: A Rare Form of Somatic Symptom Disorder?
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Background

• Empty nose syndrome (ENS) is a rare surgical complication classically characterized as paradoxical nasal obstruction, crusting, dryness despite the presence of a patent nasal airway
• Manifests months to years following a partial or complete turbinectomy
  – May also occur following procedures where turbinates remain intact
• Proposed explanations include alterations in airflow dynamics, muscosal surface area, and thermoreception
• Though ENS is associated with chronic fatigue, anxiety, depression, it is not well-described in psychiatric literature

Case Description

• Patient: 37-year-old man with a reported psychiatric history of anxiety and a medical history of deviated nasal septum and inferior nasal turbinate hypertrophy

• Course at Henry Ford Main Hospital:
  – Underwent an endoscopic septoplasty and inferior turbinate reduction
  – Approximately 3.5 months post-operatively, airway was patent, and the patient reported breathing "very well" bilaterally
  – Over the course of the next 12 months, he complained of right-sided nasal obstruction, dryness, suffocation
  – As a result of persistent post-operative complaints, he contacted the on-call otolaryngologist, presented to the emergency department numerous times, and underwent plastic surgery evaluation

• Course at hospital systems locally, regionally, nationally
  – Seen and evaluated by approximately 20-30 different otolaryngologists
  – Repeated close inspection and imaging failed to reveal any pathology
  – Underwent costly procedures, including 2 stem cell injections and cartilage augmentation surgery

• Course at our inpatient psychiatric hospital:
  – Admitted as a result of suicidal statements in context of uncontrolled anxiety
  – Ultimately was diagnosed with somatic symptom disorder
  – Initiated on duloxetine monotherapy, which was titrated to 60 mg after tolerability was established
  – Referred to outpatient cognitive behavioral therapy (CBT) at discharge; however, he was eventually lost to follow-up

Validated Measures

<table>
<thead>
<tr>
<th>ENS6Q</th>
<th>Subcrit</th>
<th>SSD-12</th>
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<tbody>
<tr>
<td>Dryness</td>
<td>I (Cognitive)</td>
<td>I think that my physical symptoms are signs of a serious illness</td>
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<tr>
<td>When patient had no complaints of nasal obstruction or other associated symptoms</td>
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<tr>
<td>Lack of air sensation</td>
<td>I am convinced that my symptoms are serious</td>
<td></td>
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<tr>
<td>Others tell me that my physical problems are not serious</td>
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<td></td>
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<tr>
<td>I think that doctors do not take my physical complaints seriously</td>
<td></td>
<td></td>
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<tr>
<td>Suffocation</td>
<td>I am very worried about my health</td>
<td></td>
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<tr>
<td>Nose feels too open</td>
<td>My symptoms scare me</td>
<td></td>
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<tr>
<td>My worrisome physical complaints will never stop</td>
<td></td>
<td></td>
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<tr>
<td>I am worried that my physical complaints will continue in the future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal burning</td>
<td>My health concerns hinder me in everyday life</td>
<td></td>
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<tr>
<td>My physical complaints occupy me for most of the day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My worries about my health take my energy</td>
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Discussion

• ENS and somatic symptom disorder have many similarities:
  – High comorbidity with anxiety, depression, suicidality1-10
  – High utilization of healthcare services11
  – Hyperactivation of neurologic fear circuitry12-13
  – Up to 63% of patients with somatic symptom disorder have “Type D” personality traits14-15
  – These personality traits can be seen in those with other illnesses thought to be at least in part somatic-related, such as tinnitus and fibromyalgia

• Previously reported treatments of ENS include a combination of cognitive behavioral therapy and an SSRI or SNRI

Conclusion

• ENS may be a subtype of a somatic symptom disorder and multidisciplinary management between otolaryngologists and behavioral health specialists may help to facilitate treatment

• Clinicians should consider the possibility of a somatic symptom disorder in patients with ENS, as patient discussions can facilitate a therapeutic alliance

• Future studies are necessary to understand the relationship between ENS and somatic symptom disorder

References