Nasal involvement in Crohn’s Disease
Case report and review of literature
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DISCUSSION

Nasal involvement of Crohn’s has been described as non-specific inflammatory changes including diffuse nasal inflammation, ulcerations, crustations and atrophic rhinitis. Only two articles described septal perforations in these patients. One reported an anterior septal perforation measuring 1.5 x 1 cm4. The other one described a posterior septal perforation approximately 2 cm in diameter4. We present another case of a Crohn’s patient with anterior septal perforation.

The differential diagnosis for septal perforation includes many possible etiologies such as trauma (surgical and non-surgical), cocaine abuse, neoplasms, and inflammatory diseases (e.g. Syphillis, TB, sarcoidosis, Wegener’s granulomatosis, rheumatoid arthritis, relapsing polychondritis and Lyme disease). Crohn’s disease appears responsible for our patient’s septal perforation. Her history of recurrent nasal ulcers during late childhood likely represent the early signs of her Crohn’s disease. Crohn’s disease was not considered in her differential diagnosis at that time, resulting in a long delay (years) prior to her being formally diagnosed with Crohn’s disease. We recommend including Crohn’s disease in the septal perforation work up.

REFERENCES


CONCLUSIONS

We should be aware of the possibility of Crohn’s disease as a cause of nasal septal perforation. We should investigate for Crohn’s disease as part of our septal perforations work-up. In some cases, nasal manifestations may be the earliest signs of Crohn’s disease and our work-up may lead to earlier diagnosis and management of this debilitating disease.

CASE REPORT

A 36 year old female patient presented to Mayo Clinic Otorhinolaryngology in May 2009 complaining of nasal obstruction. She was found to have a 3 cm in diameter anterior septal perforation and collapse of her nasal side walls on gentle nasal inspiration (Fig 1). The patient had no history of prior nasal surgery, nasal trauma, or cocaine abuse. A full laboratory investigation (including complement levels, c-ANCA, p-ANCA, rheumatoid factor, ELISA for Lyme disease, syphillis screening, drug screening, tuberculin test, ACE levels and chest X-ray) revealed no other causes for septal perforation (Fig 1).

As a child, she had a history of multiple ulcers in the nose, around the nostrils, and in the mouth that were recurrent, yet she was not diagnosed with Crohn’s until many years later. These ulcers likely represented early stages of Crohn’s disease.

Table 1: Cases of nasal manifestations in Crohn’s disease

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Patient age</th>
<th>Gender</th>
<th>Diffuse inflammation</th>
<th>ulceraions</th>
<th>Crustations</th>
<th>Septal perforation</th>
<th>Congestion</th>
<th>Rhinosinusitis with polyposis</th>
<th>Atrophic rhinitis</th>
<th>Synochia and nasal stenosis</th>
<th>Granuloma lesion</th>
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<td>Ernest et al</td>
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Figure 1: endoscopic photo showing anterior septal perforation in Crohn’s disease patient.