Nasal septum perforation: rare manifestation of Crohn’s disease

Rodríguez-Castro Kryssia, Zamora-Barquero Henry
Gastroenterology Department, Mexico Hospital, Costa Rica

We report a 25-year-old man with four-year history of weight loss, diarrhea, and intermittent epistaxis. Endoscopy and biopsy showed inflammation of the nasal mucosa. Endoscopic and histologic diagnosis of Crohn’s disease was made later; the granulomatous nasal lesions responded to sulfasalazine and azathioprine. [Indian J Gastroenterol 2006;25:214-215]

Crohn’s disease very rarely involves the nasal structures, with manifestations including intermittent epistaxis, chronic mucosal inflammation, obstruction, and occasionally septal perforation. Only three cases of nasal involvement in Crohn’s disease have been reported to date. Like oral lesions, nasal involvement can precede the intestinal manifestations of Crohn’s disease.

A 25-year-old non-smoker, non-drug user, Hispanic man was referred for a 4-year history of non-bloody diarrhea, weight loss of approximately 23 Kg, and intermittent epistaxis. Several colonoscopies had failed to show evidence of disease. The patient had no arthralgia, fever, adenopathies or genital ulcers.

On investigation, the patient had severe hypoalbuminemia (1.5 g/dL), and hypochromic, microcytic anemia (hemoglobin 9.6 g/dL, hematocrit 33%). ESR was 6 mm in the 1st hour. Thyroid function tests were normal. Coagulation profile was normal. Test for HIV was negative. Immunoglobulin levels and protein electrophoresis were normal, and anti-nuclear antibodies, anti-cytoplasmic C and P antibodies, anti-smooth muscle antibodies and rheumatic factor were negative. Carcinoembryogenic antigen, alpha-fetoprotein, CA 19-9 and CA-125 were negative.

Nasal endoscopies had showed excoriation of the left nasal septum, with abundant mucus and crusting, but no septum perforation. Biopsies had revealed chronic inflammation, and absence of vasculitis, microorganisms and viral inclusions. Fungal cultures and staining were negative. No acid-fast bacilli had been found. Staphylococcus aureus was at one point thought to contribute to the pathogenesis of the lesion and the patient was therefore treated with oral ciprofloxacin. Two years earlier, nasal endoscopy had shown nasal septum perforation at the middle turbinate, and a diagnosis of angiofibroma was suggested on biopsy. Subsequent biopsies revealed a granulomatous lesion, with chronic and acute inflammatory infiltrate involving the lamina propria. Therapy was then changed, with very little response, to rifampicin, sulfisoxazole-trimethoprim, and low-dose prednisone.

Repeat colonoscopy showed patchy lesions with scarring but without stenosis in the ascending colon, and the ileocecal valve as well as a segment of ileum revealed inflammation, friability of the mucosa and a fistulous tract, suggestive of Crohn’s disease.

The patient developed bowel perforation at the site of the ileal fistula; right hemicolecctomy and ileo-transverse anastomosis was performed. The patient recovered from surgery and the inflammatory bowel disease subsided thereafter on therapy with metronidazole followed by azathioprine and sulfasalazine as maintenance therapy.

Histologically, the resected colonic segment showed acute fibrinous peritonitis and inflammatory changes associated with Crohn’s disease, including crypt abscesses, fistulas and fissures, as well as transmural inflammation. The patient’s subsequent clinical course during a year of follow up has been favorable, with total remission of his nasal lesions, and with adequate control of his gastrointestinal symptoms. He has, however, developed erythema nodosum, with a regimen of sulfasalazine 500 mg three times per day and azathioprine 50 mg per day. Several upper gastrointestinal endoscopies have shown absence of proximal gastrointestinal tract involvement.

As many as 36% of all patients afflicted by Crohn’s disease have extraintestinal involvement, common among these being arthritis, erythema nodosum, oral aphthous ulcers, and eye problems such as iritis or uveitis. Less common manifestations include laryngeal, facial and nasal involvement.

Although in the present case the patient’s nasal lesions responded favorably to standard therapy for inflammatory bowel disease, this has not been true of other extraintestinal manifestations such as laryngeal affection.

References