



LETTER TO THE EDITOR

Necrotizing external otitis on a Crohn's disease patient treated with infliximab

KEYWORDS

Necrotizing external otitis;
Infliximab;
Side effects;
Crohn's disease

Dear Sir,

This letter is about a 27 years old female with the diagnosis of Crohn's disease since July 2004, involving the duodenum, ileum and right colon. She was first treated with Mesalamine (1 g 3 id for 20 d, suspended because of the absence of efficacy), Prednisolone (four episode treatment, tapered), Azathioprine (since July 2004, up to 2.5 mg/Kg/d).

She had four previous admissions at our hospital: first in July 2004, by the time the diagnosis was established, with diarrhoea, abdominal pain, vomiting and fever; the second in November 2004 with the same symptoms; the third (January 2005) and the fourth (June 2005) admissions were because of vomiting due to duodenum stenosis. After surgical consultation, she was treated with endoscopic dilatation and started with Infliximab (5 mg/Kg 0, 2, 6 weeks). After that, the patient did well and she was maintained on Infliximab (8/8 weeks), Azathioprine (100 mg id) and Omeprazol (40 mg id).

At the time of this admission, she complained of left otalgia, otorrhea, and fever; she had no gastrointestinal complains.

The physical examination showed fever and the external ear canal had granulation tissue (Fig. 1).

The laboratory tests revealed a normocytic anemia (haemoglobin 11.2 g/dL; MCV 91.3 fl), with no leucocytosis and the erythrocyte sedimentation rate was normal; CRP (c-reactive protein) was increased (15.65 mg/dL). The tuberculosis skin test (PPD test) was negative, the culture of the ear secretions was negative, and chest X ray was also normal. An ear CT Scan revealed left mastoid sclerosis with the tympanic antrum, tympanic cavity and external auditory canal filled with soft tissue like material. The tegmen timpani and ossicles were normal but the posterior and interior wall of external auditory canal were irregular. Gallium scintigraphy revealed intense gallium uptake on the left external auditory canal extending to the mastoid and petrous part of the temporal bone, compatible



Figure 1 Purulent exudate at the left external ear canal with granulation tissue.

with Necrotizing External Otitis. She was treated with Ciprofloxacin 500 mg bid (iv for 3 weeks and then oral for another 3 weeks), Ceftazidime 1000 mg bid, iv, for 6 weeks; as for local therapy: topical ATB, alcohol and secretions aspiration.

Necrotizing (Malignant) External Otitis is an infection on the external auditory canal, involving the temporal and adjacent bones; it's a rare complication of external otitis that affects predominantly diabetic and immunocompromised patients.^{1 2} As far as we researched, there's never been an association between this disease and immunosuppressive therapy in inflammatory bowel disease.

Undoubtedly, immunosuppressors represent an important treatment in the control of Crohn's disease,³ but they also increase the risk of infectious complications, with the opportunistic infections being most commonly found to occur in patients using concomitant immune modulating drugs.^{3 4}

The therapy approach was to maintain Azathioprine and suspend Infliximab. The patient is actually well, without intestinal or ear symptoms.

References

1. Dupuchk Marsot, Quilard J, Meyohas MC. Head and neck lesion in the immunocompromised host. *Eur Radiol* Mar 2004;14 Suppl 3: E155–67 [Review].
2. Thio D, Reece P, Herdman R. Necrotizing otitis externa: a painless reminder. *Eur Arch Otorhinolaryngol* Aug 2008;265(8): 907–10 [Electronic publication 2008 May 28].

3. Lichtenstein GR, Feagan BG, Cohen RD, Salzberg BA, Diamond RH, Chen DM, et al. Serious infections and mortality in association with therapies for Crohn's disease: TREAT registry. *Clin Gastroenterol Hepatol* May 2006;4(5):621–30.
4. Toruner M, Loftus Jr EV, Harmsen WS, Zinsmeister AR, Orenstein R, Sandborn WJ, et al. Risk factors for opportunistic infections in patients with inflammatory bowel disease. *Gastroenterology* Apr 2008;134(4):929–36 [Electronic publication 2008 Jan 11].

Maria Carmo Migueis
*Otorrinolaryngology Department,
Coimbra University Hospital, Coimbra, Portugal*

9 October 2009

Gabriela Duque*
Francisco Portela
*Gastroenterology Department,
Coimbra University Hospital, Coimbra, Portugal*
*Corresponding author. Serviço de Gastrenterologia,
Hospitais da Universidade de Coimbra, Praceta
Professor Mota Pinto, 3000-075 Coimbra, Portugal.
Tel./fax: +351 239701517.
E-mail address: gabrieladuque@iol.pt (G. Duque).