EDITORIAL

Topical tacrolimus for recurrent penile Crohn's disease

Dear Sir,

Skin lesions are associated with Crohn's disease (CD) in 22–44% of patients. Metastatic Crohn's disease (MCD) is defined as granulomatous skin lesions occurring at sites separate from the gastrointestinal tract, mainly in the lower extremities and intertriginous areas. Genital MCD has been frequently described as refractory and usually begins as a non-healing ulcer, but can be shown as a papule, plaque or swelling.

We describe the case of a 24-year-old male who presented with ulcers in the penile foreskin area two weeks before admission in the Urology department. He was diagnosed with colonic and perianal CD at 9 years old (A1L3B2p). He has had multiple exacerbations since then, which only responded partially to azathioprine, infliximab and adalimumab. He has had a right colostomy and left mucous fistula since 2008, treated with azathioprine. Two months before, the patient had clinical worsening due to tenesmus, mucus discharge from the rectal stump, abdominal pain, and weight loss, with a growing size of ulcerated lesions of the penile foreskin in the last week (Fig. 1A).

Metronidazole and intravenous corticosteroids previous treatment were not effective, so we decided to perform circumcision and surgical removal of the lesion. Histology showed non-caseating granulomas, palisading histiocytes and giant cells compatible with MCD. We started treatment with adalimumab at an induction dose of 160 mg followed by 80 mg for 2 weeks, continuing with a maintenance dose of 40 mg eow with good initial progress.

At the end of the induction period, recurrence was observed with deep ulceration on the dotted line with a progressive increase in size and purulent exudate (Fig. 1B), so we initiated twice-daily therapy with tacrolimus 0.1% ointment for 4 weeks and subcutaneous adalimumab was continued. The response to topical application was fast, with improvement of the lesions after the first 24 h, progressive scarring and complete resolution in 18 days (Fig. 1C); no recurrences were observed during follow-up (18 months).

Figure 1  Evolution of penile metastatic Crohn's disease. (A) Ulcerated penile foreskin before surgical removal of the lesion. (B) Recurrence of ulcerative lesion after surgery and final of induction period with adalimumab. (C) Complete healing of penile lesion after tacrolimus ointment topical treatment.
Skin involvement in CD has been classified as specific lesions (both contiguous perianal CD and distant cutaneous MCD), reactive skin findings (erythema nodosum and pyoderma gangrenosum) and nutritional changes secondary to malabsorption. 3

Different therapeutic strategies have been reported (steroids, ciclosporin, thopurines, antibiotics, and hyperbaric oxygen) being in most patients, treatment with biological agents (infliximab or adalimumab) is highly effective. 4,5 Surgical debridement also seems to be adequate, especially in refractory cases.

Altogether, we showed a complicated case of postoperative recurrent MCD of the penis that occurred at the end of induction treatment with adalimumab where topical tacrolimus treatment helped to heal the lesion. Because of the improvement of the lesions, we continued with the scheduled maintenance dosage (40 mg eow) without needing to increase treatment, an option that must be considered in MCD undergone biological treatment.

Conflict of interest

None to be declared.

References


L. Sánchez
Surgery Department, Complejo Hospitalario Ferrol, Coruña, Spain

M. Cabanillas
Dermatology Department, Complejo Hospitalario Ferrol, Coruña, Spain

J.C. Alvarez
Pathology Department, Complejo Hospitalario Ferrol, Coruña, Spain

A. Echarri
Gastroenterology Department, Complejo Hospitalario Ferrol, Coruña, Spain

Corresponding author at: Gastroenterology Department, Complejo Hospitalario Ferrol, Avenida Residencia SN, 15405 Ferrol, A Coruña, Spain. Tel.: +34 981 334599; fax: +34 981 334015.

E-mail address: ana.echarri.piudo@sergas.es.