LETTER TO THE EDITOR

Rapid improvement of refractory pyoderma gangrenosum with infliximab gel in a patient with ulcerative colitis

Dear Sir,

Pyoderma gangrenosum (PG) is the most severe of all cutaneous extraintestinal manifestations seen in inflammatory bowel diseases. PG is more common in women than in men, predominantly affects the lower limbs and is usually ulcerative.1 Prednisone and cyclosporine have been mainstays of systemic treatment for PG, although increasing evidence supports the use of biologic therapies, such as tumor necrosis factor inhibitors.2,3 However, treatment options vary greatly based on local experience and range from local immunosuppression to amputation. Currently, no guideline for the treatment of PG exists. We report the rapid improvement of refractory PG after topical application of an infliximab gel.

In a 27-year-old woman, ulcerative colitis (UC) was diagnosed at the age of 8 years. With the exception of one course of oral prednisolone in 2006, she received mesalamine or no therapy. In February 2010, she experienced a moderate UC flare. At the same time, she developed a PG of the right lower limb, which was 6 cm in diameter. She received 1 mg/kg prednisolone, which induced clinical remission of the UC. However, the PG enlarged and got deeper. Consequently, we infused the anti-TNF-antibody infliximab, which induced complete remission after 3 weeks. With the sixth infusion she experienced severe anaphylaxis with flush, tachypnoe and hypotension due to anti-infliximab-antibodies (ATIs) and we switched to azathioprine. The PG recurred 3 months later and was resistant to oral and intravenous steroids, adalimumab, clobetasol-propionate, cyclosporine, gentamycin, topical tacrolimus, and several other topical applications as suggested by referral dermatologists and specialized wound care assistants. The PG enlarged to 15 cm diameter and caused severe pain especially at night; major surgery and even amputation was considered. Due to the continuously present ATIs, IFX re-induction was considered to be not appropriate. The findings of high TNF concentrations in wound fluid4 and the success of topical IFX gel application in chronic venous leg ulcers,5 however, were rationales for an individual attempt to treat the PG with infliximab gel. Therefore, 100 mg infliximab were dissolved in 5 mL saline and were admixed to 15 g sterile hydroxyl ethyl cellulose gel. This gel was applied to the PG, and induced rapid improvement with no side effects. A superficial hyperkeratosis remained after 8 months of follow up, which was easily tolerated (Fig. 1).

Randomized studies are mandatory to define the role of IFX gel in patients with refractory PG. However, convincing studies may be difficult to design because of the very individual courses of the underlying diseases and the varying treatment histories of PG. As a consequence of our single experience, we encourage colleagues to apply this simple treatment option in patients with refractory PG.

Conflict of interest

NT received lecture fees from Abbvie, MSD and Falk Foundation within the last three years.

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NT carried out the study and drafted the manuscript. TK participated in the study idea and helped to draft the manuscript. Both authors read and approved the final manuscript.

References

Figure 1  (A) resistant pyoderma gangrenosum, (B) IFX gel applied to the PG, (C) eight months later.

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