

# A case of HIV ulcer

**Elroy Patrick Weledji**

Department of Surgery, Faculty of Health Sciences, University of Buea, PO Box 63, Cameroon

**Corresponding author:** Elroy Patrick Weledji. Email: elroypat@yahoo.co.uk

## Lesson

HIV-associated ulcers must be distinguished from idiopathic anal fissures in HIV-positive patients and from other sexually transmitted diseases that cause anogenital ulcers as the treatments differ.

## Keywords

HIV-associated ulcer, differential diagnosis, treatment

## Case report

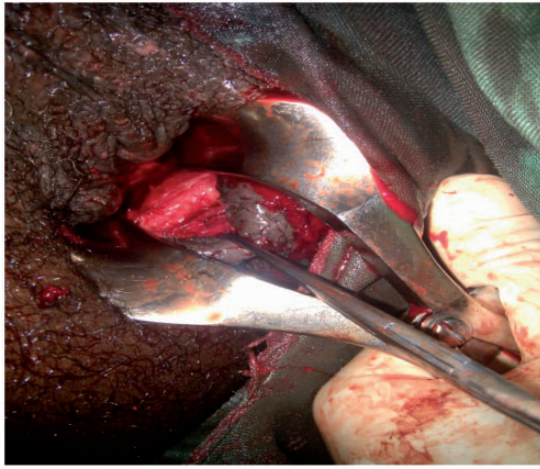
A 48-year-old heterosexual African man presented as an emergency with a progressive disabling anal pain for three days on a background one-year history of a chronic anal ulcer. He has not been on highly active antiretroviral therapy (HAART) since being diagnosed human immunodeficiency virus (HIV 2)-positive 11 years ago. The exquisite anal pain was constant, exacerbated by bowel motions and not relieved by opiate analgesia. There was no altered bowel habit but the fear of defaecation made him constipated and exacerbated the symptoms. There was no anal discharge or rectal bleeding on defaecation. He had no fever, night sweats, or anorexia but had lost weight significantly. He has a long history of severe anal pruritus which he believes precipitated the anal ulcer. Physical examination revealed a wasted man in great anal distress but with normal vital signs. Chest, cardiovascular and abdominal examinations were unremarkable. There was no soilage on inspection of the perineum and underclothes but perianal examination revealed excoriation and ichthyosis indicating long-standing pruritus. There was superficial scarring with macular patches from probable chronic herpetic simplex lesions. There was no characteristic visible posterior anal fissure or reactive perianal skin tag. A digital rectal examination was not done because of severe anal pain and spasm. He consented to examination under anaesthesia and appropriate surgical treatment. His haemoglobin level was 9 g/L but white blood cell and CD4 counts were not available. Under general anaesthesia, in the lithotomy position a digital rectal examination revealed a posterior broad based anal ulcer. Proctoscopy showed the ulcer commencing above the dentate line in the lower

rectum and ending below at the anoderm just distal to the internal anal sphincter. It was associated with an induration over a swelling which expressed copious pus and faeces on pressure into the intersphincteric space. There was no external opening into the anal skin. With the aid of the Eisenhamer retractor, the ulcer cavity was demonstrated as secondarily extending in a horse-shoe manner in the intersphincteric and submucosal planes consistent with an HIV ulcer (Figure 1). The differential diagnosis included an idiopathic anal fissure with a complicating abscess in an HIV-positive patient, an sexually transmitted disease (STD)-associated anogenital ulcer, anorectal abscess from an acutely infected intersphincteric anal gland and anal malignancy (carcinoma, lymphoma or Kaposi sarcoma). In a resourced area, biopsy would identify the treatable aetiology. The cavity was deroofed, debrided and irrigated with normal saline until brisk bleeding ensued. A minimal lateral internal sphincterotomy using the open method relieved the ensuing anal spasm. Apart from postoperative bleeding and the continuing discharge of pus that settled, he had instant pain relief. Because of a possible herpetic aetiology of the ulcer, he was commenced on acyclovir 200 mg bd for two weeks. He was discharged on the fifth postoperative day and was advised sitz baths and good perianal hygiene. Follow-up at six weeks showed an appreciative patient with a minimally painful healing anal ulcer and satisfactory anal continence.

## Discussion

HIV/AIDS patients frequently present with proctological diseases which can be divided into three categories. Firstly, proctological complaints common in the population at large (e.g. haemorrhoids, fissures and pruritus) and frequently seen in HIV/AIDS patients may be the primary reason for seeking medical help. Secondly, the diseases associated with anoreceptive intercourse including the STDs which cause proctitis and anogenital ulcerations and thirdly those illnesses associated with HIV infection such as HIV anal ulceration, unusual opportunistic infections, Kaposi's sarcoma and lymphoma.<sup>1,2</sup> The distribution

**Figure 1.** HIV ulcer after deroofing and debridement (broad base and involving the submucosal and intersphincteric planes).



of the most common anorectal pathologies reported in HIV patients includes anal ulcer (29–32%), anal condyloma (32–43%), anal fissure (6–33%), anal fistula (6–33%), perirectal abscess (3–25%) and haemorrhoids (4–14%)<sup>3</sup> Unfortunately, these have not been impacted upon by HAART.<sup>4</sup> There is a paucity of data on the incidence of AIDS-associated anal ulcers. It appears that with HAART it is a less common clinical problem because they are most commonly associated with clinical AIDS and lower CD4 counts.<sup>5</sup> These ulcers are a distinct disease process from typical anal fissures. Clinically they both result in pain with defaecation, but AIDS ulcers are more likely to result in disabling pain unrelated to bowel movements as in this case. On examination, AIDS ulcers are differentiated by their location proximal to the dentate line with a broad based ulcer which may dissect between tissue planes (Figure 1). The presence of a cavity contributes to stool and pus trapping, which may explain the severity of pain. They tend to present early because of the pain and usually with no constitutional symptoms. Biopsies identify treatable aetiologies of these ulcers, including herpes simplex virus (HSV), cytomegalovirus, *Treponema pallidum*, mycobacterium, cryptococcus, *Haemophilus ducreyi*, *Chlamydia trachomatis* and cancer.<sup>2–6</sup> As condyloma acuminatum and HSV infections are common secondary causes of pruritus ani in HIV/AIDS, biopsy of the perianal skin lesions in this patient may identify the aetiology of the ulcer.<sup>3</sup> Surgical treatment of the HIV ulcer consists of debridement, unroofing cavities to eliminate trapping and intralesional steroid injection (80–160 mg

methylprednisolone acetate in 1 ml of 0.25% bupivacaine) for the idiopathic HIV-associated ulcer.<sup>6</sup> Repeat steroid injection is performed on patients with idiopathic HIV-associated ulcer who develop recurrent pain. The response to the empirical treatment with acyclovir in this patient may indicate a herpetic simplex aetiology of the HIV ulcer, although a biopsy would have been confirmatory. Symptomatic relief is the goal of treatment as HIV ulcer healing is not common.<sup>3,7,8</sup> In this patient with no pre-existing incontinence, a lateral internal sphincterotomy was appropriate to relieve the immense anal spasm that is associated with the anal ulcer and may improve healing.

#### Declarations

**Competing Interests:** None

**Funding:** None declared

**Ethical approval:** Written informed consent from the patient was granted to write and publish the paper and associated image.

**Guarantor:** Dr George Enoworock, Director, Regional Hospital Buea, Cameroon

**Contributorship:** EPW was the sole author and surgeon

**Acknowledgements:** I acknowledge the medical students, Ngoula Madjo Charlotte and Ekollo Rodrigue, for providing the images.

**Provenance:** Not commissioned; peer-reviewed by José Arellano-Galindo

#### References

1. Dua RS, Wajed SA and Winsler MC. Impact of HIV and AIDS on surgical practice. *Ann R Coll Surg Engl* 2007; 89: 354–358.
2. Smit S. Guidelines for surgery in the HIV patients. *Contin Med Educ* 2010; 28: 356–358.
3. Brar HS, Goblesman L and Surawicz C. Anorectal pathology in AIDS. *Gastrointest Endosc Clin North Am* 1998; 8: 913–931.
4. Gonzalez Ruth C, Heartfield W and Briggs B. Anorectal pathology in HIV/AIDS infected patients has not been impacted by highly active antiretroviral therapy. *Dis Colon Rectum* 2004; 47: 1483–1486.
5. Wexner SD, Smithy WB, Milsom JW and Dailey TH. The surgical management of anorectal diseases in AIDS and pre-AIDS patients. *Dis Colon Rectum* 1986; 29: 719–723.
6. Weledji EP. Human immunodeficiency virus and the anorectum. *Alexandria J Med* 2013; 49: 163–167.
7. Modesto VI and Goblesman L. Surgical debridement and intralesional steroid injection in the treatment of idiopathic AIDS-related anal ulceration. *Am J Surg* 1997; 174: 439–441.
8. Weledji EP, Nsagha DS, Chichom AM and Enoworock G. Gastrointestinal surgery and the acquired immune deficiency syndrome. *Ann Med Surg* 2015; 4: 36–40.