Rapidly growing noduloulcerative lesion in the perineum in a human immunodeficiency virus infected patient

Sir,

The list of conditions causing female genital ulcers (FGU) is rather exhaustive, and consists of both sexually transmitted and non-sexually transmitted conditions. FGU often have an atypical presentation in human immunodeficiency virus (HIV) infected patients and often progress aggressively, thus making the diagnosis challenging.\textsuperscript{1,2} We report a case of HIV infected female presenting with rapidly growing noduloulcerative lesion in the perineum for 1 month, which was diagnosed as squamous cell carcinoma (SCC).

A 30-year-old female presented with painful ulcer in the perineum for 1 month. The documents available with patient revealed that she was HIV-1 seropositive and was on highly active antiretroviral...
therapy for 6 months. Her current CD4+ T cell count was 282 cells/mm³. The perineal lesion appeared as a small ulcer 1 month back and had been rapidly growing since then. She gave a history of recurrent genital ulceration in the past, which used to respond well to acyclovir. On examination, there was a solitary noduloulcerative lesion of size around 1.5 cm in perineum [Figure 1]. The edge of the lesion was raised and everted, and the surface was covered with yellowish crust. There was small purulent discharge from the lesion. There was no inguinal lymphadenopathy and the rest of the mucocutaneous examination was unremarkable. Gram stain from purulent discharge showed a mixed flora with a predominance of *Staphylococcus aureus* and streptococci. Tzanck smear was negative for multinucleated giant cells. Donovanosis, chancroid, and bacterial ulcer were considered as differential diagnoses. The possibility of co-occurrence of herpes could not be excluded, considering past history of recurrent genital herpes. Hence, she was given antibiotics and acyclovir for 2 weeks. On follow-up, there was a slight decrease in the discharge from the lesion, but lesion showed no tendency toward healing. An incision biopsy from the margin of the lesion was sent for histopathology, which revealed hyperkeratosis and huge acanthosis. The epidermis showed full thickness dysplasia with large atypical rounded cells with large nucleus and ground glass cytoplasm. Numerous mitotic figures as well as abnormal mitotic figures were noted [Figures 2 and 3]. These findings were consistent with diagnosis of SCC. The patient was referred to the surgery department for further management. Simple excision with a wide margin was planned as no evidence of inguinal/intra-abdominal lymph nodes or internal organ involvement was found.

FGU are not an uncommon presentation in the out-patient department, especially in sexually transmitted infections clinic and diagnosing it can be challenging as many conditions may present in such a manner.[1] The diagnosis of FGU in immunosuppressed patients such as patients with HIV co-infection can be even more challenging as ulcers are often atypical, and behave aggressively in such patients.[2]

Our patient presented with rapidly growing noduloulcerative lesion of 1 month duration. Considering SCC as differential diagnosis for a lesion of 1 month duration is difficult, and HIV status and recurrent history of genital herpes contributed to bias against SCC. However, it is a well-known fact that SCC has been noted in an increased frequency in immunosuppressed patients. For example, transplant patients have an overall 5-6% incidence of malignancy, which is 100 times greater than the general population.[3] A 23-fold risk increase for vulval/vaginal cancer has been shown for people
who have received organ transplants.\textsuperscript{3} Similarly, HIV positive women appear to be an increased risk of vaginal cancer and pre-cancer, though the magnitude of the increased risk varies in published papers from around 7 (vulval and vaginal cancer combined) to 21 times higher.\textsuperscript{4} Some studies show a particularly strong relationship for women under 30-year-old.\textsuperscript{5} Due to the rarity of published reports, the clinical progression of SCC in HIV patients is poorly understood.

FGU in HIV seropositive may pose a diagnostic challenge. High index of suspicion and biopsy are helpful in making a diagnosis. Not only sexually transmitted conditions, but also non-sexually transmitted ones too should be entertained, if lesions are consistent. Our patient had a rather short history (1 month) for SCC, which makes consideration of SCC as differential diagnosis difficult. We suggest one should consider SCC in differential diagnoses for noduloulcerative lesions, irrespective of duration, HIV status and past history of the patient.

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REFERENCES

1. Torgerson RR, Edwards L. Diseases and Disorders of the Female Genitalia. In: Fitzpatrick’s Dermatology in General Medicine (Wolff K, Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, eds), 7th ed. New York: McGraw-Hill, 2008: 677-83.
2. Pepin J, Plummer FA, Brunham RC, Piot P, Cameron DW, Ronald AR, et al. The interaction of HIV infection and other sexually transmitted diseases: An opportunity for intervention. AIDS 1989; 3:3-9.
3. Penn I. Occurrence of cancers in immunosuppressed organ transplant recipients. Clin Transpl 1994; 7:99-109.
4. Grulich AE, van Leeuwen MT, Falster MO, Vajdic CM. Incidence of cancers in people with HIV/AIDS compared with immunosuppressed transplant recipients: A meta-analysis. Lancet 2007; 370:59-67.
5. Patel P, Hanson DL, Sullivan PS, Novak RM, Moorman AC, Tong TC, et al. Incidence of Types of Cancer among HIV-Infected Persons Compared with the General Population in the United States, 1992-2003. Ann Intern Med 2008;148:728-36.

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