Perianal ulcer as a marker of tuberculosis in the HIV infected

Sir,

Cutaneous tuberculosis (TB) accounts for 0.14% of all cases of tuberculosis. Although TB is a common disease in human immunodeficiency virus infected (HIV) patients, exclusive cutaneous presentations are not common. An uncommon form of TB, tuberculosis cutis miliaris acuta generalisata, has reemerged among HIV-infected patients in recent years. The clinical appearance of the lesions is not always characteristic and culture positivity for M. tuberculosis is not always obtained. Moreover, clinical studies have shown the detrimental effects of TB on the course of HIV infection. The risk of death in HIV-infected patients with TB has been reported to be twice that of HIV-infected patients without TB, independent of the CD4 cell counts. Thus, diagnosing and treating TB at an early stage has a positive impact on the outcome of HIV. We report here three HIV infected cases with non-healing, perianal ulcers of tubercular origin.

A 39 year-old male with a non-healing perianal ulcer [Figure 1] for five months that was not responding to antibiotic and antiherpetic therapy was found to be HIV...
infected (tested by ELISA) with a CD4 count of 130 cells/mm³. The chest X-ray and ultrasonography (USG) of the abdomen revealed no abnormalities. The Mantoux test (MT) with 5 tuberculin units (TU) was nonreactive after 48 hours, and sputum tested negative for acid-fast bacilli (AFB). A fistulogram showed a fistulous tract with no communication with the rectum. A swab from the ulcer showed AFB (bacillary index 2+) on Ziehl Nelson (ZN) staining. The patient was treated with antitubercular treatment (ATT) DOTS (Directly Observed Treatment-Short Course) category I, i.e., isoniazid, rifampicin, pyrazinamide and ethambutol for two months followed by isoniazid and rifampicin for four months along with cotrimoxazole for prophylaxis of pneumocystis jiroveci pneumonia. The patient started showing signs of healing after four weeks and showed complete healing on follow-up after six months.

A 30 year-old male admitted in a surgical ward for a non-healing perianal ulcer for six months was found to be HIV seropositive. Erythrocyte sedimentation rate (ESR) was found to be elevated (125 mm) and the chest X-ray showed left upper zone and mid zone consolidation with sputum testing positive for AFB. A swab taken from the ulcer was negative for AFB. The patient was treated with antitubercular treatment (ATT) DOTs (Directly Observed Treatment-Short Course) category I, i.e., isoniazid, rifampicin, pyrazinamide and ethambutol for two months followed by isoniazid and rifampicin for four months along with cotrimoxazole for prophylaxis of pneumocystis jiroveci pneumonia. The patient started showing signs of healing after four weeks and showed complete healing on follow-up after six months.

A 38 year-old HIV-positive male had a nonhealing perianal ulcer for six months. He also had seborrheic dermatitis and oral hairy leukoplakia with raised ESR (98 mm) and reactive MT (20 mm) at 48 h with 5 TU; USG of the abdomen showed splenomegaly. Neither the swab taken from the ulcer nor the sputum showed any AFB on ZN staining. The patient was given ATT category I due to the high ESR with positive Mantoux test and splenomegaly seen on USG. The ulcer showed signs of healing after one month and showed complete healing after completion of ATT, suggesting a diagnosis of tuberculous ulcer. CD4 counts could not be determined in cases 2 and 3 due to a scarcity of resources.

The main clue that pointed towards the tubercular origin of the ulcer in the 1st case was the AFB seen on ZN staining in the swab taken from ulcer. The 2nd patient had high ESR, consolidation seen on the chest x-ray along with sputum positivity for AFB. The 3rd patient had high ESR, reactive MT and splenomegaly. There was no response to antibiotic or antiherpetic therapy in all the three cases and response to ATT pointed to tuberculous nature of the ulcers in all of them.

A positive smear for AFB is suggestive of contagiousness and these patients should be treated promptly. Farina reported a case of acquired immunodeficiency syndrome (AIDS) with ulcers over the nose, cheeks and forehead resembling herpes simplex infection with no AFB visible on ZN staining. The biopsied material was subjected to culture which showed growth of M. tuberculosis.[2] Pandhi et al.[3] reported that response to ATT evaluated after four weeks can be used to support the diagnosis of cutaneous TB in doubtful cases where laboratory results are equivocal as in case 3 of this report. Chiewchanvit et al, reported three HIV-infected patients with cutaneous TB confirmed by culture and polymerase chain reaction.[6] Although the diagnosis of cutaneous TB may be confirmed by ZN staining from skin biopsies or smears, results are often negative because skin lesions are typically paucibacillary.[7] In resource-poor settings where culture and PCR facilities are not available, a high index of suspicion, meticulous screening for other TB foci with the help of available facilities such as chest X-ray, USG of the abdomen, MT, smear for AFB from the local site and response to ATT, are helpful in establishing the diagnosis of cutaneous TB.

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REFERENCES
Sir,

Pustular psoriasis is of two major types: localized and generalized.[1] Localized pustular psoriasis is usually confined to the hands and feet and tends to be chronic. Generalized pustular psoriasis may involve the whole body, having a subacute, acute or even fulminating and life-threatening course.[2] Annular pustular psoriasis which is usually generalized, is also reported as being localized to the dorsa of the feet.[3] Although localized pustular psoriasis usually presents over the hands and feet, only one case report has been reported of localized pustular psoriasis involving the penis.[4] We herein report a case of circinate pustular psoriasis over the glans penis mimicking circinate balanitis.

A 37 year-old married man presented with recurrent episodes of multiple, painless, pustular eruptions over the glans penis of four years' duration. He gave no history of fever, joint pains, redness or burning sensation of the eyes or skin or mucosal lesions elsewhere in his body. Treatment with antibiotics (doxycycline, metronidazole, and penicillin) and topical steroid ointments resulted in remissions. Local examination revealed a typical circinate pattern of pustular eruption over the glans penis. These lesions morphologically mimicked circinate balanitis [Figure 1]; systemic examination was unremarkable. Ophthalmological examination was normal. Darkfield microscopy was negative and so were KOH scrapings for candida. Serology for syphilis [Venereal disease research laboratory test (VDRL) and treponema pallidum hemagglutination test (TPHA) and HIV (ELISA)] was negative; routine urine microscopy was not rewarding.

Histopathological examination of the lesion over the glans penis revealed mild hyperkeratosis and neutrophilic aggregations in the superficial layer of epidermis. There were marked dysplastic changes in the epidermis and a chronic lymphocytic infiltrate in the upper dermis. These features were compatible with pustular psoriasis. The patient was treated with dapsone 100 mg daily. The glans lesions subsided completely in four weeks [Figure 2].

References