Secondary cutaneous aspergillosis

Sir,

Aspergillosis is a uncommon opportunistic fungal infection caused by a variety of species of which \( \textit{Aspergillus fumigatus} \) and \( \textit{niger} \) are the common ones.\(^1\) \( \textit{Aspergillus flavus} \) is most commonly associated with primary cutaneous aspergillosis and \( \textit{Aspergillus fumigatus} \) with disseminated disease. Aspergillosis is generally a complication of severe debilitating illnesses and occurs in patients suffering from malignancies, tuberculosis, silicosis and diabetes. It also occurs in patients who are receiving long-term corticosteroids, antibiotics or cytotoxic drugs and in immunocompromised states.\(^1\) Cutaneous lesions are rare in aspergillosis. Primary cutaneous aspergillosis may present as macules, papules, plaques or hemorrhagic bullae, which may progress into necrotic ulcers that are covered by a heavy black eschar.\(^2\) Voriconazole is a new antifungal agent found to be effective in aspergillosis.\(^3,4\)

We report a case of primary cutaneous aspergillosis in a patient on oral corticosteroids.

A 45-year-old farmer, presented with history of multiple painful nodules over the extremities and trunk for two years. The lesions gradually increased in size and new nodules appeared in the last six months prior to admission. The patient had been diagnosed to have chronic dermatitis earlier and was taking oral prednisolone at a dose of 20 mg per day for more than a year prior to the onset of painful nodules. On examination there were multiple large and small tender nodules on the face, limbs and trunk. Over the right hand and foot the nodules measured 6 x 10 cm in size (Figure 1). Infiltrated, erythematous papules were seen on the nose, forehead and cheek. Similar discrete disseminated papules were seen on the trunk. Oral mucosa, palms and soles were normal. Discoloration and dystrophy were seen on the finger and toenails.

Investigation results revealed hemoglobin of 8.2 gm%; total count of 10,000 cells/cmm with 34% polymorphs, 58% lymphocytes and 8% eosinophils. ESR was 46 mm at one hour. The other investigations like blood sugar, renal and liver function tests were normal. Histopathologic examination of the nodules under H and E revealed normal epidermis with micro-abscess formation in the dermis. Special stain with Gomori's methenamine silver (GMS) demonstrated the fungus. The fungus was seen with the characteristic branching at an angle of 45° within thrombi in vessels, which was consistent with aspergillus species (Figure 2). Skin nodule and nail culture in SDA medium grew \( \textit{Aspergillus} \).
Aspergillus species are among the most ubiquitous fungi, seen in soil, water, decaying vegetations and any substrate that contains organic debris. The respiratory tract is the most common primary portal of entry. After candida albicans, the aspergillus species is the second most common cause of human opportunistic fungal infection. Our patient was taking oral corticosteroids for more than one year for chronic dermatitis, which could have caused immunosuppression. Cutaneous aspergillosis has been reported earlier in two patients on high doses of corticosteroids.[5] Our patient presented with multiple cutaneous nodules with nail involvement. A larger nodule on the finger was excised. The histopathologic examination of the nodule confirmed the diagnosis and GMS stain demonstrated the fungi inside the vessel wall. Aspergillus flavus species was identified in the culture. The sites colonized by aspergillus include paranasal sinuses, the external auditory meatus and dystrophic nails.[6] In our patient, nail infection could explain the source of fungi inside the vessel wall of skin lesions. Although voriconazole has been found very effective it was not available and hence we treated the patient with itraconazole. We report this case for its interesting clinical features, rarity of occurrence and to highlight the hazards of prolonged intake of oral steroids.

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REFERENCES


Ulcerative lupus vulgaris

Sir,

Lupus vulgaris is in most instances a chronic slowly progressive disease, occurring in patients with immunity produced by previous tuberculous infection. The individual lesions begin as reddish brown papules that coalesce to form a plaque with a serpiginous border. The plaque grows by peripheral extension, while healing at one end. Large ulcerative lesions are not commonly encountered. In western countries LV is common on the face, while in India, lesions are more often encountered on extremities and trunk. A case of a large ulcerative lesion of LV on sole is being reported.

A 15 year old girl presented with an ulcer on the right foot of 2½ years duration. It started as a small papule on the right sole which broke down and ulcerated. Over the course of a few months it spread to involve the whole sole. She did not have cough or fever. Family history of tuberculosis was negative.

On examination, she was found to be very emaciated. A large ulcer 15 cm x 8 cm, covered with slough, was seen on the right sole, extending onto the sides of the foot. (Figure 1) Foul smelling, purulent discharge was present. Movements of foot were not restricted. Other systems were clinically normal, except for Bitot’s spots in the eyes.

All relevant hematological and biochemical investigations were within normal limits. There was no evidence of pulmonary tuberculosis and no bony pathology could be detected on X-Ray of the right foot. ELISA test for HIV infection, VDRL and Mantoux test