NOCARDIAL MYCETOMA AT UNUSUAL SITE

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Summary

A case of Nocardial mycetoma is presented occurring at upper back. Clinical and laboratory studies established the diagnosis. Excellent therapeutic response was obtained with sulphadiazine alone within five months of therapy.

Mycetoma is a chronic, localized granulomatous infection characterized by an indurated lesion with multiple fistulae and intercommunicating sinus tracts which exude seropurulent discharge containing small granules of variable size and colour.

Mycetoma was first reported (as Madura foot) by Gill in 1842 from Madura and confirmed by Colebrook in 1846. The term mycetoma was coined by Carter[1] in 1861 while describing the above mentioned cases and reporting two of his own cases.

Mycetoma due to Nocardia species has been reported from various places in India[2,3,4], more so from southern region. Some of the authors have reported isolation of Nocardia asteroides[5,6,7,8] in their cases. So far there are only two cases of Actinomycotic mycetoma reported from north by Klokee[9] and Kandhari et al[10]. Prompted by the rarity of reports, another case of Nocardial mycetoma from the north is being reported where the lesion appeared at an unusual site.

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Case Report

A fifty years old female from Himachal Pradesh presented at skin-outpatient department of P.G.I., Chandigarh in July, 1977 with multiple discharging sinuses on her right upper back of three years' duration. The lesion started as multiple nodular swellings which within four months' time, broke down and developed into multiple sinuses discharging sero-sanguinous and seropurulent material. The lesion gradually progressed to involve whole of the right upper and middle back. There was no history of injury to the back or respiratory, neurological or spinal disorders. Prior treatment with steroids and immuno-suppressive drugs was absent.

General physical examination revealed mild anaemia.

Local examination of the swelling showed that it extended over most of the right suprascapular, scapular and infrascapular regions. Surface of the lesion was erythematous and at places bluish-brown in colour. Swelling was warm, non-tender, indurated and was soft and fluctuant at other places. Multiple sinus tracts were present; many of them inter-communicating and discharging seropurulent material

which contained yellowish white granules (Fig. 1). On investigation, haemoglobin was 8 0 G per cent. Total leucocytic count was 13,200 cells/cmm with differential count of P_{78}, L_{24}, E_3 percent. ESR was 62 mm at the end of 1st hour by Westergren method. Blood biochemistry including proteins, sugar, electrolytes, urea, creatinine and calcium were all within normal limits.

vealed a dense mixed infiltrate of polymorphs, lymphocytes and plasma cells with ulceration of overlying epidermis. Special stains were negative for fungal elements.

Therapy

Patient was started on oral sulphadiazine, on admission in the dose of 8 G per day in four divided dosages.

Fig. 1 Mycetoma on right back.

Sputum for acid fast bacilli was negative on three occasions. X-rays of chest and dorsal spine did not reveal any abnormality.

Pus and a portion of biopsy material on smear examination showed branching filaments with cocco-bacillary forms at the periphery. Culture on Sabouraud's glucose agar medium showed growth of Nocardia species. Subsequent four subcultures grew a mixed growth making the identification of sub-species of Nocardia difficult. Histopathology re-

Fig. 2 Five months after therapy.

Seventy-five percent healing occurred after three months of therapy. Complete healing occurred within five months with the same treatment (Fig. 2).

Discussion

Mycetomas are grouped under two headings. Actinomycotic, caused by actinomycetes and Eumycotic, caused by true fungi. Actinomycotic mycetoma is more commonly seen and those caused by Nocardia species have been reported from all parts of the country[2-8]. Out of two cases reported from north, one from Punjab[9] was caused by Nocardia brasiliensis. The other reported[10] from Delhi was caused by Streptomyces. Thus, this is second case report of Nocardial mycetoma from north.

The mycetoma occurred at an unusual site in our case. Only one other case of mycetoma has been reported[5] occurring on back. Other reported cases have been on usual sites like feet, gluteal region, thighs and lower legs.

Desai et al[11] while analysing the therapeutic response of Mycetoma to various drugs like sulpha, penicillin, dapsone, tetracyclines, chloramphenicol and streptomycin concluded that sulphadiazine alone or in combination with penicillin is the drug of choice in Actinomycotic mycetoma caused by Nocradia brasiliensis, asteroides and anerobic actinomyces. Excellent therapeutic response obtained in this patient with five months of therapy with sulphadiazine alone, confirms that sulphadiazine still remains the drug of choice in Nocardial mycetoma.

Refereuces

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