Case Report

RECURRENT CUTANEOUS ACTINOMYCOSIS

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ABSTRACT: Atinomycosis can affect any organ in the body and cutaneous variety is very uncommon. Clinical findings of painless subcutaneous nodules and discharging sinuses usually leads to diagnosis. We report a case of recurrent cutaneous actinomycosis which was treated by surgical excision and combination antimicrobial therapy including dapsone.

KEY WORDS: Actinomycosis, Recurrence, Dapsone.

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INTRODUCTION

Actinomycosis is a chronic granulomatous disease caused mainly by Actinomyces Israeli which are the commensals of mouth and intestine. It was first reported in humans by Israel in 1878 and in 1891 Wolff and Israel were successful in culturing the micro-organism[1]. The disease may involve any organ of the body. There are five main clinical types known, depending on the primary site of infection, namely cervicofacial, thoracic, abdominal, pelvic and cutaneous[1,2]. The clinical triad of painless subcutaneous nodules, sinuses and discharge usually leads to diagnosis[3]. Actinomycosis is treated with a combination of surgical excision along with prolonged course of antimicrobial therapy[4].

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CASE REPORT

A ten year old child, M.A was admitted on 6th March, 2002 with recurrence of multiple discharging sinuses over left gluteal region for 2 weeks. When he was two years old he received an injection on left buttock for fever. After a month, he developed a swelling at the site of injection which was painless. The swelling was excised and the wound healed but after about three years he developed multiple sinuses in the scar. He received several treatments in different hospitals for about five years till his admission in Hamdard University Hospital in Aug. 2001, where a clinical diagnosis of Actinomycosis was made and excision of skin & sub cutaneous tissues was performed along with sinuses. Histopathology confirmed the diagnosis of Actinomycosis and he was kept on penicillin for three months but in March 2002 he developed sinuses in the scar without constitutional symptom for which he was readmitted. General physical as well as systemic examination revealed no abnormality. On Local Examination: There was a 10×2 cm scar on left gluteal region with multiple sinuses

and serous discharge. There was no hyperemia in the adjacent skin and inguinal lymph nodes were not enlarged.

Investigations:

CBC:	Hb 11.4G/, PCV 34, WCC 10,000 per cc mm with normal differential count, platelate count was normal.
C/S:	Swab taken from the serous discharge showed no growth.
X-Ray Pelvis:	No bony involvement seen.

Treatment:

He underwent wide local excision of scar along with all sinuses. This excision was upto the level of subcutaneous tissues. Histopathology revealed skin and subcutaneous tissues with number of suppurative granulomas having central Actinomycotic colonies. The wound was left open and closed secondarily after one month. He was kept on Augmentin and Dapson for three months. He is symptom free till today.

DISCUSSION

Cutaneous Actinomycosis is very uncommon. The source of Actinomycotic infection is almost invariably endogenous, trauma often appears to provide the portal of entry and it has been reported even after human bite[5,6]. As in our case intramuscular injection was the possible route of invasion. Other known factors leading to actinomycosis are poor dental hygiene, surgical intervention or visceral perforation for e.g. perforated appnedix. Recurrence following surgical treatment is high in Actinomycosis[3].

Diagnosis is confirmed on finding the organism in pus or on histopathological examination of surgical specimen. Whole pus should be collected for culture because pus swab is usually insufficient to demonstrate classical "sulphur granule"[5,7].

The organism has a wide spectrum of sensitivity to penicillin, sulphonamide, oxytetracycline, tetracycline, erythromycin, chloramphanicol, streptomycin with the recent addition of dapsone, which in combination with other antibiotic has been reported to give favorable results [1,2,8,9].

CONCLUSION

Cases of cutaneous actinomycosis are not that rare in Pakistan but bony involvement is not reported. Recurrence is common if proper antimicrobial agents are not used for a prolonged period. It is also worth noting that dapsone is quite effective in eradicating the disease.

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