GRANULOMA INGUINALE SIMULATING SQUAMOUS CELL CARCINOMA

(Case report in a labourer from Madhya Pradesh)

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Abstract

A case of extensive granuloma inguinale simulating squamous cell carcinoma is described. There was past history of urethritis leading to a urethral fistula. The ulcer healed almost completely within 19 days of receiving streptomycin injections. The patient had associated scabies and presumably also had latent syphilis (His VDRL was reactive in 1:8 dilution). The patient belonged to Madhya Pradesh.

Granuloma inguinale or Donovanosis is a venereal disease of relatively low contagiousness. In contrast to the commonly held view that granuloma inguinale is a venereal disease, few workers have argued against a venereal transmission of the disease[1]. On the other hand Lal and Nicholas, as a result of their study of 165 cases of the disease, are strongly in favour of venereal transmission[2].

Sowmini et al[3] in their data on the prevalence of Donovanosis in India suggested the role of climatic influences in governing the epidemiology of the disease. According to these authors, a constantly high temperature of 75–90°F and a moderately high relative humidity of 50–60% in conjunction with moderate rainfall are favourable for establishing endemic foci of this disease. The same authors also emphasized that Donovanosis is prevalent in other parts of India besides the south. On the basis of their inference regarding climatic influence, Sowmini et al[3] also stated that a minor prevalence of Donovanosis could be expected in both Jammu and Kashmir and Madhya Pradesh.

More recent reports[4,5] have confirmed the view that foci of Donovanosis exist in most states of India. To our knowledge, the only states from which no case of Donovanosis has yet been reported are Jammu and Kashmir, Madhya Pradesh, Assam and adjoining states further east.

The present report describes a case of extensive granuloma inguinale in a

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labourer from Bilaspur district of Madhya Pradesh.

Case Report

A 30 year old male labourer from Madhya Pradesh presented to our hospital on 11—10—77 complaining of a large non healing ulcer situated around the root of the penis for one year. He was admitted the same day under the care of the general surgeons. One year previously the patient had developed a skin coloured papule on the dorsum of the root of penis. It subsequently formed a painful ulcer which gradually spread in spite of topical therapy and 3 injections of penicillin. Along with the ulcer the patient also noticed asymptomatic swellings in both the groins. He admitted to having had a heterosexual exposure to a prostitute in Madhya Pradesh 6 months prior to the onset of the lesion. He denied any subsequent exposure. He was a widower and of a very poor hygiene. He never used to bathe for upto 40 days at a time. Prior to admission the patient also developed itchy papular lesions on the body with nocturnal aggravation of itching.

12 years previously the patient had an exposure which was followed by pus discharge per urethra and also an ulcer on the tip of the penis. The ulcer gradually healed with depigmentation but the urethral discharge was followed by a urethral fistula which never healed. The patient had not received any specific treatment at that time.

General physical examination of the patient did not reveal any abnormality except for large 2–3 cm sized lymph nodes in the groins and smaller ones in the axillae and cervical area. Systemic examination did not reveal any abnormality. There was no obvious neurological deficit.

On cutaneous examination there was a large beefy-looking ulcer situated around the root of the penis and extending from the pubic area onto the scrotum ventrally (Fig 1). The edges of the ulcer were well-defined and slightly raised and there was seropurulent discharge from the ulcer. The ulcer was tender on palpation.

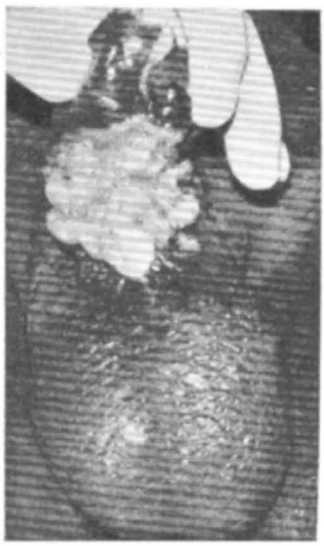

Fig. 1
The large beefy looking ulcer extends from the penis onto the scrotum ventrally. Involvement of the pubic region is not seen in this view.

The penis was distorted and a depigmented scar could be seen around the urethral meatus. There was also a urethral fistula opening on the ventral surface of the penis about ½ cm from the tip. In addition to the above, the patient also had ichthyosis and papular lesions predominantly on scabies sites. There were no oral mucosal lesions or condyloma lata.

A provisional diagnosis of squamous cell carcinoma was made by the general surgeons. The patient was given terramycin 1 G/day orally for 5 days

in order to control the secondary infection of the ulcer. The patient also received an adequate course of anti-scabetic treatment with 25% benzyl benzoate. In view of the history of exposure, a dermatological consultation was obtained in order to rule out a venereal disease.

On account of the reactive VDRL report the surgeons also started the patient on Injection procaine penicillin 8 lakhs every day which was given for 2 days only. Injection procaine penicillin and capsule terramycin (Oxytetracycline) were discontinued once the patient was started on streptomycin injections.

Investigations

A biopsy from the edge of the ulcer did not show any evidence of malignancy.

BIOPSY REPORT: There is marked acanthosis and a florid infiltrate in the dermis which extends upto the basal cell layer. The infiltrate consists of macrophages, mononuclear cells and neutrophils. Few plasma cells and eosinophils are also seen.

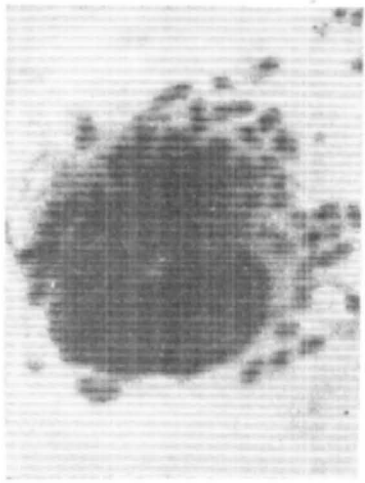

Fig. 2
Tissue smear stained with Giemsa : Oil immersion view of a mononuclear cell showing numerous Donovan bodies in the cytoplasm.

Tissue smears were taken from the ulcer and stained with Giemsa and they confirmed the diagnosis of granuloma inguinale. Pink Donovan bodies were seen within the cytoplasm of mononuclear cells (Fig. 2).

VDRL was reactive in 1 : 8 dilution.

Urine, stool and chest x-ray were all normal. The total leukocyte count was 17,000 and the differential count was as follows :-

Neutrophils	—	47%
Lymphocytes	—	24%
Mononuclears	—	4%
Eosinophilis	—	25%

The absolute eosinophil count was 4,500/cumm.

Further progress of the patient in hospital

On 17—10—1977 the patient was started on Streptomycin 1 G twice daily by the intramuscular route. Within 19 days the ulcer almost completely healed with depigmented scar formation (Fig. 3). The patient was then discharged and advised to continue streptomycin injections for another 7 days and to return for follow up. It was intended to repeat his VDRL and treat for syphilis on his return. In view of his eosinophilia he was also advised to take diethylcarbamazine (Hetrazan) 200 mg thrice daily for 5 days orally. The patient was subsequently lost to follow up.

Discussion

The present case illustrated how the advanced ulcerative lesion of granuloma inguinale could be mistaken for squamous cell carcinoma[6]. This case was unusually large and

Fig. 3
Showing complete healing of the ulcer with depigmented scar formation.

extended all the way around the root of the penis. The incubation period for the disease was 6 months in this case, which corresponded to the longest incubation period observed by Lal and Nicholas[2]. Also, the data obtained in this case were in accord with some of the reasons outlined by Lal and Nicholas favouring venereal transmission of the disease[2]. The initial lesion started on the root of the penis, the patient had a past history of urethritis and his VDRL was reactive in 1 : 8 dilution suggesting a probable diagnosis of associated latent syphilis. Anti-syphilitic treatment was postponed until the course of Streptomycin injections should be completed. It was unfortunate that the patient did not return for follow up.

In the data of Sowmini et al[3], there was no case of Donovanosis reported from the single medical centre in Madhya Pradesh which replied to their questionnaire. However, it was stated by these authors that as a result of their data on climatic influence, they expected a minor prevalence of Donovanosis in Madhya Pradesh. In this regard it is of interest that our patient belonged to Madhya Pradesh and had contracted his infection within the state.

Acknowledgement

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