

TINEA IMBRICATA (A Case Report and Review of the Literature)

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Summary

A case of Tinea Imbricata is reported. The literature pertaining to its epidemiology, clinical features & treatment is briefly reviewed.

Tinea Imbricata (TI) is a distinct pathological & clinical entity produced by a specific fungus belonging to the genus *Trichophyton* (or *Endodermophyton*). It is characterized by annular, slightly elevated patch with a circle of scales at the periphery. The scales are firmly attached to the border of the circle and have their free edges pointing towards the center.

To a dermatologist from a non-endemic area TI is only familiar as a picture in ^{the}text books. Only a few reports¹⁻³ of TI have appeared in the Indian literature. To our knowledge, there has not been a single report since 1942. Recently, we had the opportunity to see a typical case of TI in the Dermatology OPD of Gauhati Medical College & Hospital. He was successfully treated with Griseofulvin. Rarity of such cases particularly in the Indian medical literature prompted us to report the case.

Case report

A twenty years old Nepali male from a village of Darrang district, (Assam)

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reported for the first time in May, 1975 to Dermatology OPD, with complaints of scaly, itchy lesions all over the body since his childhood. Initially he had annular scaly lesions over the left forearm just below the elbow. It was associated with mild to moderate itching. A few other similar lesions appeared after one to two months over the trunk. The lesions were progressive in nature and within a period of one year had spread all over the body except scalp, face, palms and soles. On the limbs the lesions were of exfoliative type. Except mild to moderate itching and cosmetic disfigurement he had no complaints. His father was reported to have had similar skin eruptions all over the body for many years.

General Physical examination and systemic examination revealed no abnormality. On local examination the lesions were extensive and asymmetrically distributed all over the body except the face, scalp, palms and soles. Lesions on the chest, back and upper part of the abdomen were arranged in concentric rings of scales (Fig. 1 Page No. 288). The rings were brown in colour and the scales were dry, fine, adherent at the periphery and easily removable. On the arms, forearms, thighs and legs there were diffuse scaly

lesions and the circle or the concentric patterns were not evident (Fig. 2 Page No. 288). Auspitz sign was negative.

Routine blood, stool and urine examinations were within normal limits. S. T. S. was negative.

Mycological Studies :—

Scrapings from the lesion were teeming with mycelia and culture showed growth of faviform colony typical of *Trichophyton concentricum*.

Course in the Hospital

The patient was treated with Griseofulvin 250 mg. twice a day with high fatty meals. There was marked improvement within a fortnight and lesions completely cleared after one month of therapy. However, the treatment was continued for 60 days to ensure that no fungal spores or hyphae were left on the skin. Scraping and culture at the time of discharge of the patient were negative.

Review and Discussion

Tinea imbricata was first described by Sir William Dampier in 1789. It is always an endemic disease and fungi responsible for it are found only in man. The disease is common among natives of south & central pacific regions, among aborigines of South East Asia and American Indians. In India, Castellani¹ first reported one case from South India. Acton & Ghosh² reported one case from Mymensingh district of Bangladesh (the then East Bengal). They investigated the case, gave beautiful description and cultivated the organism in different media. They also produced typical lesions of TI by inoculating the culture materials on a volunteer. Dey³ working in various parts of Assam observed typical cases in many aboriginal tribes in the hilly areas of this province. He observed that it was rare in the

immigrant inhabitant living on the plains under slightly better conditions than the aborigines and that when it was found in plain dwellers there was invariably evidence that the person had frequent and close contact with the aborigines³. Our patient substantiates this conclusion because out of an approximate 5000 new cases seen in our OPD in 1975 this is the only case seen. The patient is an aborigine from a village in Darrang district, Assam.

The disease is transmitted only by human contact. In our case the father of the patient had the same skin complaint. Patient being the youngest and the very favourite of his father had very close contact with him as the two slept together. Father often used to carry the patient. It is probable therefore that the patient contracted the disease from his father.

The incidence of the disease is un-influenced by race, sex or age and there is no evidence that any race has natural resistance or immunity⁴. This had led to the view that the disease is incurable and retirement from active service used to be granted for victims of this condition⁵. In our case patient got the infection during childhood and at the time of examination (he was 20 yrs.) he still had the disease with no tendency to spontaneous cure.

Various authors have listed different species of fungi as the causative organism of TI but due to the concentric designs of the lesions the name *Trichophyton* (or *Endodermophyton*) *concentricum* seems appropriate.

A typical case presenting as concentric rings is not a diagnostic problem but cases may present with circinate diffuse or exfoliative lesions. Our case presented with two types of lesions - the

concentric rings on chest, back & upper part of the abdomen, and exfoliative lesions on arms and legs.

Treatment

With the advent of Griseofulvin the treatment of TI has become very simple. 0.5 gm. of Griseofulvin daily for an average period of 45—60 days with high fatty meal is the standard therapy for this condition. Response to the therapy is dramatic and in one case of Church & Snedden the response to Griseofulvin was seen within 7 days. Our case showed definite signs of improvement after a fortnight of therapy and the lesions completely cleared up after one month's treatment (Fig. 3 page No. 288). When examined 6 months later there was no sign of relapse.

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