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Case Report

A Case Study of Tinea Corporis in A 27 Year Old Female Patient

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Abstract

Tinea Corporis is a superficial fungal infection of bare skin of the trunk and extremities caused by dermatophytes of the three genera i.e. *Microsporum*, *Epidermophyton* and *Trichophyton*. *Trichophyton* rubrum has been reported as the most common organism that leads to tinea corporis. Tinea corporis is also known as ringworm or tinea circinata or tinea cruris frequently diagnosed by dermatologists. The diagnosis of tinea corporis is made based on the clinical appearance and is further confirmed by culture or microscopy test. Topical or oral antifungal medications are used to cure superficial dermatomycoses. This case report is to spotlight the case of an 27 year old female who came with complaints of rashes and extensive lesions since past two years.

Keywords: *Microsporum; Trichophyton rubrum*; Dermatophytes

Introduction

Dermatophytes are a group of fungi belonging to three different genera and the most common cause of superficial fungal infections seen in humans and other animals. It is commonly termed as Ringworm infection or Tinea. The three different genera of dermatophytes: *Trichophyton, Microsporum* and *Epidermophyton* and are further classified as geophilic, zoophilic, or anthrophilic based on there residence in soil, animals, or on humans respectively [1,2]. It is also possible that every human being, be it of any race or geographical lesion will get infected by dermatophytes at some point of their time. The lesions are observed on exposed areas of the body such as face and arms. *Trichophyton rubrum* is one of the most common pathogen out of the three genera which usually represents extension onto the trunk region or extremities of tinea cruris, pedis, or manuum. Clinical findings suggest that classic lesions are associated with itching and rings of erythema having scaly border and central clearing are observed [3-6].

Here, a case of 28 year old woman affected with tinea corporis is presented who was earlier on itraconazole as a therapeutic measure and now had presented again with lesions.

Case Report

A 28 year old female presented to the outpatient department of dermatology at our institute, with chief complaints of dry reddish lesions on the arms, face, hands and trunk of the body since past two years. Patient had earlier visited dermatologist and was taking itraconazole earlier. After 8 days she re-visited our department and complained that she did not get any relief and lesions were present all over her body. (Figure 1). No family history was known for the same. Apart from this patient also complained of generalized weakness.

Figure 1: Represents lesions observed on patient's arms and hands.

Patient was advised to get investigated for Complete blood count (CBC), glycosylated haemoglobin (HbA1c), urinalysis, fasting blood sugar (FBS), thyroid profile, lipid profile, liver and renal function test. Urinalysis shows albumin traces and urine culture came out to be negative. Glycosylated haeoglobin was 4.61% which was again normal. Thyroid profile indicated T3 1.16 µg/ml, T4 9.37 ng/ml and TSH 1.81 µIU/ml. ESR came out to be 14 mm/1st hr. Total leukocyte count was 18970 cells/µL and haemoglobin was 14.3 g/dl. Fasting blood glucose was 127 mg/dl. Based on physical examination and after seeing the laboratory investigations as well, the treatment advised is given in table 1.

Drug	Dose	Frequency	Route
Tab. Sebifine (Terbinafine)	250 mg	OD	P/O
Tab. Zorbax (Griseofulvin)	500 mg	HS	P/O
Tab. Wysolone (Prednisolone)	20 mg	OD X 5 days **½ tablet for next 5 days**	P/O
Cap. Isotroin (Isotretinoin)	20 mg	HS	P/O
Tab. Pan 40 (Pantoprazole)	40 mg	OD	P/O
Cap. Itaspor (Itraconazole)	100 mg	BD	P/O

Table 1: Drug therapy advised.

Apart from the above therapy patient was advised to apply lupiaqua lotion twice daily. Patient was also advised for medicine consultation after which patient was initiated capsule C mycin 300 (Clindamycin) thrice a day and tablet levobact 500 (levofloxacin) once daily for five days.

Patient came for follow up after 15 days and was doing well now. The lesions started vanishing and patient was also feeling better.

Conclusion

Antifungals pay keyrole in combating infection caused by dermatophytes. Clinicians must be aware of cutaneous dermatophytosis and infection caused by *T. violaceum*. Terbinafine and Itraconazole appears to be the effective choice of treatment. Other body parts specially scalp must be examined and adequate treatment should be initiated to eradicate the infection and prevent re-infection.

Ethical Declaration

Informed consent was taken from the patient before the data collection stating that no identity of the patient will be disclosed.

Conflicts of Interest

There are no conflicts of interest.

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