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THE PREVALENCE OF DERMATOPHYTOSIS IN PATIENTS ATTENDING AL-YARMOUK TEACHING HOSPITAL

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ABSTRACT
Dermatophytic infections are common with many clinical types. A total of 96 patients with dermatophytosis were examined in Dermatology Outpatient Department in Al-Yarmouk Teaching Hosptal during the period from December 2014 to August 2015. Results revealed that the prevalence rate was 0.01% with dominant teen age group and a male: female ratio of 2.5:1. Two thirds of patients were from rural areas. T.corporis (31.2%) was the commonest type followed by T.capitis (25%). No T. barbae or manum were found.

KEYWORDS: Dermatophytic infections clinical epidemiological aspects.

INTRODUCTION

Dermatophytic infections are among the commonest infections encountered in Dermatologic practice. Their etiologic agents are classified into 3 genera of imperfect fungi; Epidermophyton, Microsporum, Trichophyton, grouped according to their natural habitat asanthropophilic, zoophilic and geophilic with primary reservoir of infection in humans, animals, and the soil respectively.[1,2]

Dermatophytes have the ability to invade keratinized tissue (skin, hair and nails) but are usually restricted to the non –living cornified layer of the epidermis, because of their inability to penetrate viable tissue of immune-competent host.[3,4]

However, invasion does elicit a host response ranging from mild (usually with anthropophilic fungi) to severe (with zoophilic fungi).[2,4]

Clinically, fungal infections of eight anatomical regions are commonly recognized; T.capitis, T.corporis, T.cruris, T. pedis, T.facaei, T.barbae, T. manum and T. unguium.[1,2]

The current study was arranged to assess the different clinical and epidemiological aspects of dermatophytosis among patients in Al – Yarmouk Teaching Hospital.

PATIENTS AND METHODS

A total of 96 patients with dermatophytosis were examined in Dermatology Outpatient Department in Al-Yarmouk Teaching Hosptal during the period from December 2014 to August 2015.

Diagnosis was mainly clinical and relied on KOH examination in suspicious cases.

Patients were enquired regarding their age, sex, residence, occupation, animal contact, present complaint, duration of lesion, mode and time of onset of lesion, history of associated skin diseases for the patient and his family.

Clinical examination was done for the patients regarding the site, size and morphology of the lesion.

KOH examination was done in eight cases to confirm the diagnosis.

RESULTS

During a six-months period we were able to collect 96 patients with dermatophytosis out of 9000 patients who attended the dermatology outpatient department of Al – Yarmouk Teaching hospital giving a prevalence rate of 0.01% for dermatophytic infections.

Patient,s ages ranged between 9 months- 41 years with a median age of 14.7 years ± SD of 11.5 year.

There were 68 (70.8%) males and 28 (29.1%) female patients with a male: female ratio of 2.5:1. (Fig:1).

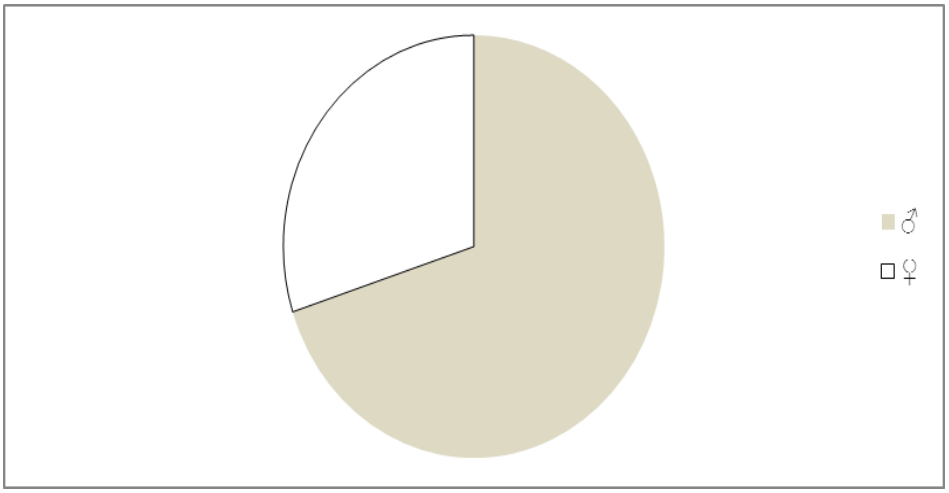

Fig. 1: Sex distribution of 96 patients with Dermatophytosis.

Regarding residence, 61(63.5%) patients were from rural areas while 35(36.4%) patients were from urban areas (Fig.1.).

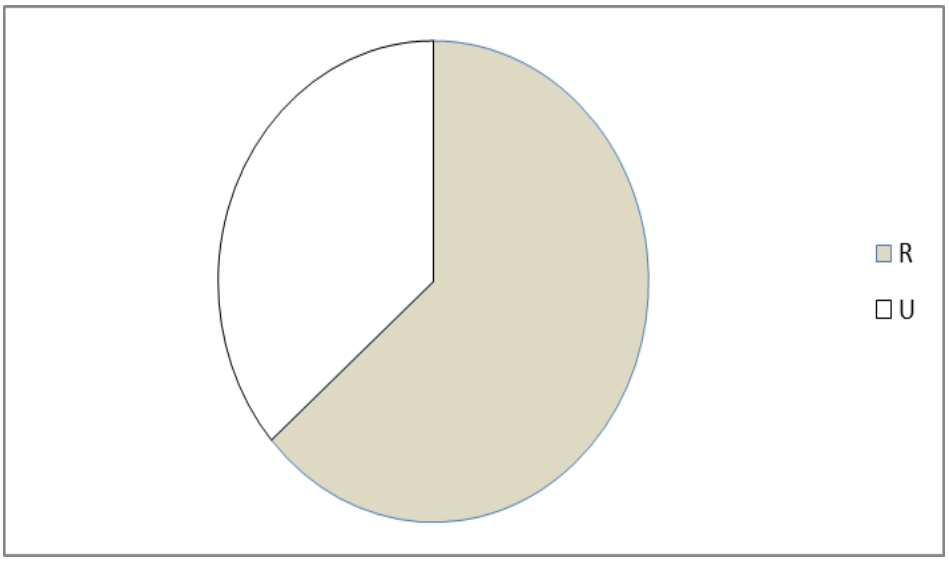

Fig. 2: Residence distribution of 96 patients with Dermatophytosis.

U=urban R= rural

The different clinical types of dermatophytic infections were summarized in table.1.

Table 1: Clinical Types of dermatophytosis.

Clinical Types	No. of cases	Percentage (%)
T.corporis	30	31.2
T.capitis	24	25
Grey patch	10	41.6
Kerion	8	33.3
Black dot	6	25
Favus	0	0
T.cruris	15	15.6
T. pedis	12	12.5
T.Unguium	10	10.4
T.Faciei	5	5.2
T.barbae	0	0
T.Manum	0	0

Sex distribution of different clinical types was as shown in table.2.

Table 2: Sex distribution of different clinical types of dermatophytic infection.

Clinical Type	Male		Female	
	No.	%	No.	%
T. corporis	22	73.3	8	26.7
T. capitis	16	66.7	8	33.3
T. cruris	12	80	3	20
T. pedis	7	58.3	5	41.7
T.unguium	6	60	4	40
T. Faciei	5	100	0	0

Tinea crporis was the main clinical type (31.4%) seen among our patients, affecting mainly the upper extremities 12(40%), trunk10 (33.3%) & lower extremities 8(26.7%).

Regarding T. unguium, the distal subungual type was the most common (80%), while the proximal subungual type was seen in (20%) of patients.

The other types were not seen in the study.

DISCUSSION

Dermatophytosis is commonly encountered in the outpatient dermatologic clinics and our study revealed a prevalence rate of (0.01%). This result is comparable to a prevalence rate of 0.02% and 0.03% obtainable from Basrah, Iraq.[5] and Hamadan, Iran[6] respectively, while is much less than the (4.54%) rate reported from Nepal.[7]

Patients ages showed a wide age range between 9 months to 41 years, however, they showed accumulation around the teenage group with a median of 14.7 years (predominately by T.corporis and T. capitis patients which constituted the majority of cases).

This indicate that dermatophytic infection can occur at any age, as it had been reported[8], and agree with other reports of predominant teen age group with the range of 11-20 years reported elsewhere.[7]

Males were affected more than females with male:female ratio of 2.5:1, this is concordant with the literature of a male to female ratio of 2.5:1[7] to 1.5:1.[5]

The majority of our patients came from rural areas (63.5)%, even though the hospital is located in an urban area, this may reflect that a large proportion of patients attending this hospital are from rural areas in the outskirts of Baghdad.

In the present study, the most common clinical types dermatophytosis were T.corporis (31.2%) followed by T. capitis (25%). Reports in the literature showing T.capitis as the most common clinical type with figures of (70%) in the Marseille –France[10], (62.9%)min Hamadan-Iran[6], (35.2%) in Basrah –Iraq[5] and (34.2%) in United Arab Emirates.[9] However, a report from Nepal revealed T.corporis (43%) as the most common clinical type of tinea. Followed by T.cruris (33%) and Tpedis (20%).[7]

The scaly patch type was the most common (41.6%) variant of T.capitis followed by kerion (33.3%) and black dot type (25%) while no patients with favus were seen, in agreement with the general reports regarding their prevalence.[1,3]

Tinea barbae and T.manum are both relatively rare[2,7] and were not found in our study.

All types of dermatophytic infections showed more male affection in the present study. This agrees with literature reports.[5,7] Males have a higher incidence of Tinea probably because they have more exposure to sporting facilities and institutions, have less careful hygienic practice, and more occupational risk of exposure to dermatophytic infections.

Upper extremities were the site mostly affected (40%) by T.corporis while lower extremities were the least (26.7%). However the figures were relatively approximate and consistent with the literature reports.[3,11]

Concerning types of T.unguium the dominant type was the distal subungual variety (80%), a finding consistent with the literature[3,12] and with the reports that describes other types as less common or rare varieties.[12,13]

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