

PREVELANCE OF DERMATOPHYTOSES IN THE PATIENTS OF AL -KINDY HOSPITAL - BAGHDAD⁺

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Abstract

Dermatophytoses were studied in 100 patients , (63%) of them were males and(37%) females in the ratio of 1.7:1 , over a period from January till June 2002 in Al-Kindy Hospital .Out of 100 scraping specimens , (58%) showed dermatophytoses and the commonest age group was (6-10) years old (22%) .

The most common fungal lesion was tinea corporis (65.5%) followed by tinea capitis (60.7%) , tinea pedis 25% and tinea unguium 20% . Out of 58 positive cases , only 10 (17.2%) patients had previous infection , whereas 30 (51.7%) of them had family history with dermatophytes . This study shows there is no relation between the place of living and dermatophytes .

المستخلص

تمت دراسة إصابات فطار الجلد dermatophytoses في ١٠٠ مريض ، ٦٣% مريضاً منهم كانوا ذكوراً و ٣٧% إناث وبنسبة ١,٧ : ١ ، للفترة من كانون الثاني حتى حزيران ٢٠٠٢ في مستشفى الكندي ، أظهرت النتائج ان ٥٨% منهم مصابين بفطار الجلد من مجموع ١٠٠ مريض وكانت أعلى نسبة إصابة ٢٢% للفئة العمرية ٦-١٠ سنة وكان أكثر الآفات الفطرية الجلدية هي فطار الجذع والجسم (٦٥,٥%) ، تليها فطار الراس (سعة الراس) (٦٠,٧%) ، فطار القدم (٢٥%) واخيراً فطار الظفار (٢٠%) . أظهرت الدراسة ان من مجموع ٥٨ إصابة فطرية هناك ١٠ (١٧,٢%) من المرضى لديهم اصابة فطرية سابقة وهـناك ٣٠ (٥١,٧%) مريض لديهم أحداً او اكثر من عائلتهم مصاب بالفطريات الجلدية ، كما أظهرت الدراسة أنه لا يوجد علاقة بين الموقع السكني والأصابة الفطرية .

Introduction

Dermatophytoses are among the most prevalent infections in the world . Cutaneous mycoses are caused by fungi that infect only the superficial keratinized , dead layers of skin , nail and hair [1,2]

Dermatophytoses are known as “ringworm” or tinea in which the lesion spreads in circle about a healing scaly , central portion [2] . Tinea is a chronic fungal infection of the skin, hair and nails[3] . Hypersensitivity to the fungi plays an important role in the pathogenesis of these diseases[2] .

⁺ Received on: 23/5/2004 - Accepted on: 30/3/2005

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Dermatophytes are acquired by direct or indirect contact with contaminated soil or with infected human or animals [1,3,4] .

All of the dermatomycoses tend to be more severe and extensive in the tropical climates[3].

There is some correspondence between the etiological agent and the location of the clinical manifestation for Trichophyton which infects the hair , skin and nail , Microsporum infects the hair and skin and Epidermatophyton infects the skin and the nail [1,5] .

Fungal lesions on skin are (Tinea corporis) , on Scalp (Tinea capitis) , on foot (Tinea pedis) , on nails (Tinea unguium) and groin (Tinea cruris) [1,4] .

Dermatophytoses can be persistent and troublesome, they are not debilitating or life – threatening [1] .

Aim of the research is to determine the distribution of fungal lesion in patients with dermatophytoses , and to note the cases of recurrence infection .

Patients And Methods

One hundred scraping specimens were collected from 100 patients attended Al-Kindy Hospital from January till June 2002 The age was from less than 5 years to above 40 years .

Scraping from skin , nails or hairs was plucked from involved areas . Specimens were placed on a slide in a drop of lactophenol stain . A coverslip was added and it was examined after 20 minutes branching hyphae or chains of conidia were seen in hairs, forming dense sheaths of spores around the hair (ectothrix) or inside the hair shaft (endothrix) [1,2] .

Results and Discussion

In this study the incidence of dermatophytoses is 58% the rest patients may be under cortizone treatment or infected with another cutaneous disease such as scabies . Out of 100 patients 63 were male and 37 female in the ratio of male to female of 1.7: 1, and this may be due to the fact that male is more exposed to contamination with dermatophytes than female, this result is in agreement with that of Agarwalla et al [6] who found that the M:F ratio was 2.5 :1 and also agreement with Anderson [5] who found that males are afflicted more frequently than females .

The commonest age group was (6-10) years old (22%) this may be because this age represents age of activity so these groups are more exposed to contaminated soil and animals with low socioeconomic status of family .

In this study out of all the clinical types tinea corporis (65.5%) is the most common fungal lesion , this result is in agreement with that of Agarwalla et al ., [6] who found that tinea corporis (43%) was the most common clinical type .[7] found

tinea corporis was predominant clinical type (24.57%) .[8] found that (24%) of high school wrestler had lesion of tinea corporis .This study disagrees with [9] found that tinea pedis (64.4%) was the most common clinical type

In this study tinea corporis is followed by tinea capitis (60.7%) , tinea pedis(25%)and tinea unguium (20%).Agarwalla et al ., [6] found that tinea corporis was followed by tinea cruris and tinea pedis , while [7] found that tinea. corporis was followed by tinea cruris. Kasai [8] found tinea pedis was followed by tinea unguim (20.1%) , tinea corporis (7.5%) , tinea cruris (5%) then tinea capitis and tinea barbae.

This incidence is influenced by humidity and temperature.

In the present study out of 58 positive cases only 10(17.2^o) patients (6 of them were males and 4 were females) had previous infection with dermatophyte , which could be a source of new infection . This result is in agreement with that of [5]who found that harboring of organism may be more important than exogenous reinfection in causing recurrences .

Out of 58 patients , only 30(51.7%) patients 22(73.3%) of them were males and 8(26.7%)were females had family history . This indicates the possibilities of transferring infection (cross- infection). This result is in agreement with that of Jawetz et al.,[1] [3] [4] who found that dermatophytes are acquired by direct or indirect contact with infected human , contaminated soil and animal .

This study shows no relationship between the places of living , socioeconomic status and dermatophytoses but all people could be infected with fungal infection , this result is in agreement with that of [10] who found that it is probable that every normal person has been infected with at least one of the dermatophytes at sometime , often in childhood .

Table(1) : Distribution of suspected patients according to the age and Gender

Age in years	Male	Female	Total
< 5	18	2	20
6-10	17	5	22
11-15	8	2	10
16-20	2	4	6
21-25	4	4	8
26-30	2	12	14
31-35	4	0	4
36-40	2	4	6
> 40	6	4	10

Total	63	37	100
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Table(2) : Distribution of 58 dermatophyte cases of fungal lesions

Dermatophytoses	Male		Female		Total		
	No cases	Positive case	No cases	positive case	No cases	positive case	% of positive case
Tinea corporis	33	25	25	13	58	38	65.5%
Tinea capitis	20	15	8	2	28	17	60.7%
Tinea unguium	4	0	6	2	10	2	20%
Tinea pedis	4	1	0	0	4	1	25%
Total	61	41	39	17	100	58	

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