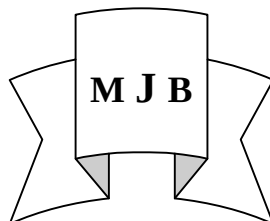


A survey of Dermatophytoses in Hilla

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Abstract

From 160 patients with dermatophyte-infections; Tinea pedis & Tinea cruris had showed a high rat of infection. Five species of Trichophyton, in addition to some yeast growth were diagnosed. Negative growth of specimens culturing was represented 23.12 % from all patients no. , in spite of clinical diagnoses of dermatophytoses .Males show higher incidence in the No. of Tinea infection than females.

الخلاصة

جمعت عينات من 160 مريض مصاب بمرض السعفة الجلدية Tinea disease والمشخصة سريريا ، حيث أظهرت سعفة القدم Tinea pedis وسعفة المغبن Tinea cruris أكثر نسبة من الإصابة مقارنة مع أنواع السعفات الأخرى ، مع تشخيص خمسة أنواع من فطريات Dermatophytes التابعة إلى الجنس Trichophyton إضافة إلى نمو بعض أنواع الخمائر . وشكلت نسبة عدم النمو للعينات المزروعة 23.12 % من مجموع العينات الكلية مع ملاحظة إن الذكور أكثر نسبة للإصابة من الإناث .

Introduction

Human skin is liable be infection by different types of pathogenic superficial fungi .Dermatophyte was noted to be the most common one which is colonized hair , nail and stratum corneum layer of the skin to yield Dermatophytoses or Tinea disease in different parts of the body e.g. Tinea cruris (groin) , Tinea corporis (glabrous skin) , Tinea capitis (scalp) and Tinea pedis (between Toe) , with occurring of some types of yeasts , mainly *Candida albicans* [1] .

Dermatophytoses has been reported in a various parts of the world [2, 3, and

4] including Iraq [6, 7] in which a high rat of patients infected by Dermatophytes fungi every year [8].

The aim of this study is to do a survey to know the types of species of Dermatophytoses infection in one of the big Iraqi city (Hilla).

Materials & Methods

One hundred and sixty (160) patients their ages ranged from (5-45 years) sufferings from dermatophytoses were examined clinically in Merjan teaching hospital / department of Dermatology, during five months (from December, to end of April 2004.

Skin scraping and hair were directly examined under the microscope with 20 % KOH, in order to see dermatophyte spore and hyphi and immediately cultured in a slant of Sabouraud's dextrose agar (Oxford, England) then incubated at 25-28 ° C for 1-3 weeks .Fungi species was diagnosed according to Emmons [9], Rippon [8] and Kwon-chung [10].

Results

From 160 patients , 43 cases (26.87%) of Tinea pedis were isolated, followed by 38 cases (23.75 %) Tinea cruris, 34 cases (21.25 %) Tinea corporis, and 30 cases (18.75 %) Tinea capitis. Males were found to be affected more than females (except, in Tinea manuum).

Five species of Trichophyton were diagnosed after culturing of skin sampling , in addition to yeast growth (10 %) (Table 1) , while a negative growth was also occur to represented (23.12 %) from all patients whom diagnostic clinically as have Dermatophytoses .

Trichophyton mentagrophytes and *Trichophyton rubrum* had been shown a high percent of Dermatophytes growth (30 % , 26.25 % representively) in contrast with other species (Table 1).

Discussion

Dermatophytes were depended for their growth on the dead keratin substance of animal skin cells (stratum corneum] , hairs and nails (8 , 9] , therefore , animals and humans becomes a good host for infection by a various species of dermatophytes to yield dermatophytoses or Tinea disease.

The period of sample collection for this study was done at winter season in Iraqi country and that made Tinea pedis and Tinea cruris revealed a high rat of

Dermatophytoses, in contrast with other type of Tinea disease (Table 1), because of variation of environmental factors for Dermatophytes growth; as temperature and humidity [11].

Trichophyton rubrum and anthropophilic variants of *Trichophyton mentagrophytes* causes a chronic infection in human than other types of dermatophytes [1 , 10] , and that explain the high rat of these species isolated from dermatophytoses , whereas yeast had been recorded to cause a secondary infection in the site of Tinea disease or give the same clinical picture of dermatophytoses when infected the skin , especially *Candida albicans* [8,9] .

Some times clinical sign was not enough for the diagnosis of dermatophyte infection, so that culture might need to add to give the perfect diagnosis [12].

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Table 1 Number and species of Dermatophytoses types with Fungi species.

Fungi species	Tinea Capitis		Tinea Corporis		Tinea Mannum		Tinea Pedis		Tinea Cruris		Total number
	M	F	M	F	M	F	M	F	M	F	
<i>T. mentagrophytes</i>	3	1	8	3	zero	zero	18	3	8	4	48 30%
<i>T.rubrum</i>	1	zero	3	5	4	6	6	3	12	2	42 26.25%
<i>T.tonsurance</i>	2	1	2	1	zero	2	zero	zero	zero	zero	8 5%
<i>T.violaceum</i>	3	3	zero	zero	zero	zero	zero	zero	zero	zero	6 3.75 %
<i>T. verrucosum</i>	2	zero	zero	1	zero	zero	zero	zero	zero	zero	3 1.87 %
Yeasts	4	zero	3	2	zero	2	zero	2	3	zero	16 10 %
Negative	6	4	2	4	1	zero	7	4	9	zero	37 23.12%
Total	21	9	18	16	5	10	31	12	32	6	160
	30		34		15		43		38		
	18.75%		21.25 %		9.37 %		26.87 %		23.75 %		