

Results

This study was performed on patients selected from Dermatology Out Patients Clinic Of Benha University Hospital during the period from January to December 2003. The study was done on 300 cases suffering from different forms of tinea.

Table (4): Clinical diagnosis of the studied cases

Clinical diagnosis	No	%
▪ T. capitis	115	(38.3)
▪ T. unguium	75	(25)
▪ T. corporis	40	(13.3)
▪ T. pedis	25	(8.3)
▪ T. cruris	20	(6.7)
▪ T. faciei	10	(3.4)
▪ T. manum	9	(3)
▪ T. Barbae	6	(2)
▪ Total	300	(100)

Table (4) represents the clinical diagnosis of the studied cases, T. capitis represented the largest group 115 (38.3%) followed by T. unguium 75 (25%), T. corporis 40 (13.3%) T. pedis 25 (8.3%), T. cruris 20 (6.7%), T. faciei 10 (3.4%), T. manum 9 (3%) while T. barbae represented the smallest group 6 (2%).

Table (5): Age distribution of the studied cases

AGE/ year	No	%
< 6 year	20	(6.7)
6-14	89	(29.7)
15-30	93	(31)
31-46	90	(30)
46 – 49	8	(2.6)
Total	300	(100)

Range = (4 – 49) Mean = (34.5) SD = (5.91)

Table (5) shows the age distribution of the studied cases from which, it can be concluded that the age ranged from 4 – 49 years, the mean of age was 34.5 and largest group 93 (31%) cases were in age group from 15 - 30 years.

Table (6) Age distribution according to the clinical forms of the disease

<i>Clinical forms</i>	<i><6 years</i>		<i>6 – 14</i>		<i>15 – 30</i>		<i>31 – 46 y</i>		<i>46 – 49</i>		<i>Total</i>
	<i>No</i>	<i>%</i>	<i>No</i>	<i>%</i>	<i>No</i>	<i>%</i>	<i>No</i>	<i>%</i>	<i>No</i>	<i>%</i>	
T.capitis	19	(16.5)	78*	(67.8)	18	(15.7)	-	0	-	0	115
T.unguium	1	(1.3)	4	(5.3)	15	(20)	55*	(73.4)	-	0	75
T.corporis	-	0	5	(12.5)	20	(50)	15	(73.5)	-	0	40
T.pedis	-	0	-	0	15	(60)	6	(24)	4	(16)	25
T.cruris	-	0	2	(10)	13	(65)	3	(15)	2	(10)	20
T.faciei	-	0	-	0	7	(70)	3	(30)	-	0	10
T.manum	-	0	-	0	3	(33.3)	4	(44.4)	2	(22.3)	9
T.barbae	-	0	-	0	2	(33.4)	4	(66.6)	-	0	6
Total	20	(6.7)	89	(29.7)	93	(31)	90	(30)	8	(2.6)	300

* $P < 0.05$ significant

Table (6) shows the age distribution according to the clinical forms of the disease, it was out of 115 cases of T.capitis 78 (67.8%) had an age ranged from 6-14 years and the difference was stastically significant in relation to other age groups. In T.unguium 55 (73.4%) cases out of 75 had an age ranged from 31- 46 years and the difference was statistically significant in relation to other age groups.

Table (7): Gender distribution of the studied cases.

Clinical diagnosis	Total No	Male		Female	
		No	(%)	No	(%)
T.Capitis	115	65	(56.3)	50	(43.7)
T.unguium	75	33	(44)	42	(56)
T.corporis	40	28	(70)*	12	(30)
T.Pedis	25	14	(56)	11	(44)
T.Cruris	20	3	(6)	17	(94)
T.Faciei	10	7	(70)*	3	(30)
T.manum	9	3	(33.3)	6	(66.7)
T.barbae	6	6	(100)**	0	(0)
Total	300	159	(0)	141	(0)

* $P < 0.05$ (significant).

** $P < 0.01$ (highly significant) by using Chi-square test.

Table (7) shows the gender distribution of the studied cases. It was found that there were a higher incidence of infections with T.corporis, T. Faciei and T.barbae among males more than females and the differences were statistically significant. Other forms shows insignificant differences in both sexes.

Table (8): Occupational status of the studied cases

Occupation	No	%
School and preschool age	140	(46.6)
Farmer	54	(18)
House wife	48	(16)
Worker	40	(13.4)
Employer	18	(6)
Total	300	(100)

Table (8) shows the occupational status of the studied groups from which it was found that the largest group 140 (46.6%) were school and preschool group, farmer 54 (18%), house wife 48 (16%), worker 40 (13.4%) while the lowest group 18 (6%) were employer.

Table (9): Results of direct diagnosis of the studied samples with KOH (20%)

Clinical Diagnosis	Total No	Direct diagnosis			
		Positive		Negative	
		No	(%)	No	(%)
T.Capitis	115	47	(40.8)	68	(59.2)
T.unguium	75	23	(30.7)	52	(69.3)
T.corporis	40	11	(27.5)	29	(72.5)
T.Pedis	25	6	(24)	19	(76)
T.Cruris	20	5	(25)	15	(75)
T.Faciei	10	3	(30)	7	(70)
T.manum	9	2	(22.5)	7	(77.8)
T.barbae	6	2	(33.3)	4	(66.7)
Total	300	99	(33%)	201	(67%)

* Chi square test used $P > 0.05$ non significant

Table (9) shows the result of the direct diagnosis with KOH (20%) it found that it was positive in 99 (33%) out of 300 cases studied and the differences between the different clinical forms were statistically insignificant.

Table (10): Results of culture of the studied samples on S.G.A.

Isolated dematophytes	No	%
▪ Trichophyton	204	(68)
• T.violaceum	90	(30)
• T. mentagrophytes	61	(20.3)
• T.rubrum	36	(12)
• T.tonsurans	17	(5.6)
▪ Microsporum	23	(7.6)
M.canis	23	(7.6)
▪ Epidermophyton	24	(8)
E.floccosum	24	(8)
▪ No growth	49	(16.4)
▪ Total	300	(100)

Table (10) shows the results of culture of the studied samples on SGA medium. Were positive in 251 (83.6%), and no growth in 49 (16.4%) out of 300 cases examined.

Out of 251 positive cases by culture, Trichophyton represented 204 (68%), Microsporum 23 (7.6%) and Epidermophyton 24 (8%).

Table (12): The comparsion of the result of the direct & culture methods of diagnosis

Method	Result				Total	
	Positive		Negative			
	No	%	N	%	No	%
Direct method	99	(33)	201	(67)	300	(100)
Culture methods	251	(83.6)	49	(16.4)	300	(100)

Test of significance

Mc Nemar test $P < 0.001^{***}$

From table (12) that compare the results of direct and culture methods of diagnosis it was found that, the difference between both was statistically highly significant.

Table (13) Accuracy of the direct method of diagnosis in relation to culture

Direct – Method	Culture		Total
	Positive	Negative	
Positive	90	9	99
Negative	161	40	201
Total	251	49	300

From table (13) that shows the accuracy of the direct method of diagnosis in relation to culture, it was found that,

sensitivity = 35.8, specificity = 81.6% accuracy =43.3%.

Positive predictive value 90.9%.

% of false positive 9.1%.

Negative predictive value 19.9%.

% of false negative 80.1%.