TINEA CAPITIS IN THE NABLUS AREA

BY HISHAM M. ARDA*, M.D., Nablus

بلغت نسبة الاصابات الغطرية في فروة الرأس (T, C) بين مرضى الجلد الذين شخصت حالتهم في العيادة الخارجية لمستشفى الاتحاد وفي عيادة جلدية في مدينة نابلس حوالي T, C بالمئة ، كان حوالي T, T بالمئة من مرضى (T, T) من المناطق الريفية ، وكان T, T بالمئة من هو T تحت سن العاشرة ، وقد اظهر فحص لجرى على اطفال المدارس الابتدائية في قريتين ، ومخيم للاجئين وفي مدينة نابلس ان نسبة الاصابة ب (T, T) قد بلغت T0 بالمئة بين اطفال القرى ، و T1 بالمئة بين اطفال المخيم و T1 بالمئة بين الطفال في مدينة نابلس .

ABSTRACT

During 1972 - 1979 tinea capitis patients constituted 4.2% of all new dermatology patients clinically diagnosed at the outpatient skin clinic in Ittihad Hospital and at a private clinic in Nablus. About 78.6% of tinea capitis patients were from rural areas. 76.5% of them were under the age of 10 years. In a survey at primry schools in two villages, in a refugee camp and in the city of Nablus, the incidence of tinea capitis was found to be about 15% in the village schools, 3% in the camp and 1.8% in Nablus.

Formerly Assistant Professor of Dermatology, Jordan University Hospital.

INTRODUCTION

Ringworm of the scalp (tinea capitis) is an infectious disease of children rather than adults². The disease is still a public health problem in those parts of the world where the antibiotic griseofulvin is not readily available¹⁰. Tinea capitis seems to be uncommon in Israel, since only 21 cases out of 1000 cases of dermatophytosis seen in Tel-Aviv area were tinea capitis¹.

This study was aimed at assessing the problem of tinea capitis in the West Bank and at raising interest for the control of the disease.

PATIENTS AND METHODS

All cases of tinea capitis seen at the Outpatient Dermatology Clinic - Ittihad Hospital and Dr. Arda Dermatology Clinic in Nablus, during the period 1972 - 1979 were analysed. Patients mainly came from the nothern districts of the West Bank.

Children at two primary schools in each of Nablus, Dair - Sharaf village and Balata Camp were screened for the persence of tinea capitis in 1978. Male children at a primary school in Arrabah village were examined in 1974, 1978 and 1979 and those found to have tinea capitis were treated with griseofulivn F.P. (10 mg/Kg. of body weight in divided doses for 6 weeks).

Diagnosis of tinea capitis depended on the clinical picture of the disease and was confirmed by direct microscopy of hair spicemens in KOH.

RESULTS AND DISCUSSION

Table 1 shows the distribution of tinea capitis patients (1261) diagnosed at the outpatient clinics (1972 - 1979) according to sex and residence. The results show that 97.2% of the cases were present as scaly patches with partial loss of hair, 2.4% were of the inflammatory type kerion and only 0.4% were favus.

Table 1. Number, sex, and residence of tinea capitis patients

Year	No. of skin patients	T., C.	%	Males	Females	City	Village	Camp
1972	3322	92	2.8	44	48	25	65	 2
1973	3189	115	3.6	71	44	13	95	7
1974	<i>3877</i>	135	3.8	<i>77</i>	58	21	106	8
1975	4211	171	4.0	<i>83</i>	88	22	140	9
1976	1960	81	4.1	42	39	16	58	7
1977	4371	185	4.2	<i>87</i>	98	32	140	13
1978	3943	209	5.3	76	133	<i>30</i>	173	6
1979	5018	273	5.4	114	159	42	214	17
Total	29891	1261	4.2	595	667	201	991	69

The results indicate that 4.2% of all dermatology patients were having tinea capitis. They also show a higher frequency of infected females. Such results seem to contradict with those previously reported^{2,7} where males were more affected than females.

The age of tinea capitis patients varied from 7 months to 48 years. However the majority of patients (76.5%) were under the age of 10 years. This is in agreemet with several other investigators^{7,8} Out of 18 patients over the age of 15 years there were 14 females. This is in accord with the results of Malhotra⁸ and Grin⁶.

Table 2. Incidence of tinea capitis in primary schools in 1978

	Children examined		Patients		Mean age in	
Place	No.	M/F	No.	M/F	years	%pts.
Dair Sharaf	 74	40 /34	11	7 / 4	7.1	15.0
Balata Camp	224	110 / 114	7	3 / 4	6.6	3.0
Nablus City	163	92 / 71	3	2 / 1	6.7	1.8

The results (Table 2) indicated that the incidence of the disease was higher at primary schools in rural areas than in urban areas or in refugee camps. This may be due to poor hygienic conditions, overcrowding and contact with animals in rural areas 5,77,8

The peak of age incidence in this study was 6 - 8 years in males and 3 - 5 years in females which is in agreement with that found by Curry & Daniels⁴ in Manchester region.

Children who were found to have tinea capitis in the primary school at Arrabah Village (Table 3) were treated with griseofulvin F.P. (10 mg/Kg of body weight in divided doses for 6 weeks). It is note worthy to mention that the incidence of tinea capitis in the primary school at Arrabah village (Table 3) decreased from 15.3% in 1974 to 3.3% in 1979 as a result of the treatment.

The incidence of the disease in the West Bank seems to be much higher than that reported from Israel, where only 21 cases of tinea capitis were diagnosed in Tel - Aviv area among 1000 dermatophytosis patients seen in a period of 5 years¹.

A more thorough investigation is needed to show the real status of all dermatophytoses, their etiological agents and sources of infection in the West Bank. Such a study has now been carried out by Shtayeh & Arda¹.

Table 3. Incidence of tinea capitis at a primary school in Arrabah village

	Children		Mean age in	•		
Year	examined	Pts.	years	% of pts.		
1974	320	49	9.2	15.3		
1978	<i>355</i>	24	9.2	6.8		
1979	456	15	9.0	3.3		

REFERENCES

- 1. Alteras, I. and Lehrer, N. (1977). A critical study of 1000 cases of dermatophytosis in Tel-Aviv area during 1970 1975. Mycopathologia, 62, 121 124.
- 2. Beare J. M, Gentles J.C. and Mackenzie, D.R. (1972). Mycology, in *Textbook of dermatology*. ed. by A. Rook, D.S. Wilkinson. and F.J.G. Ebling. Sec. edition. Oxford: Blackwell Scientific Publications.

- 3. Caprilli, F., Mercantini, R., Marsella, R. and Farotti, E. (1980). Etiology of ringworm of the scalp, beard, and body in Rome. *Sabouraudia*, 18, 129-135.
- 4. Curry, J., Daniels, G. (1958). Ringworm of the scalp in school children in Manchester and region. Medical Officer, 93, 165.
- 5. El-Zawahry, M. (1963). Skin Diseases in Arabian Countries. Cairo: French Institute of Oriental Archeology.
- 6. Grin, E. I. (1970). Epidemiology and control of ringworm of the scalp. International Symposium on Mycosis, Washington. 149 156.
- 7. Karaoui, R., Salim, M. and Mousa, A. (1979). Incidence of dermatophytosis in Kuwait. Sabouraudia, 17, 131 137.
- 8. Malhotra, Y. K., Gang, M.P., Kanwar, A. J. and Ngrajan, S. (1979). A study of tinea capitis in Libya (Benghazi). Sabouraudia, 17, 181 183.
- 9. Malhotra, Y.K., Gang, M.P. and Kanwar A.J. (1979). A school survey of tinea capitis in Benghazi. Journal of Tropical Medicine and Hygiene, 82, 59.
- 10. Rook, A. And Rodney, Dawber (1982). Diseases of the hair and scalp. First edition. Oxford: Blackwill Scientific Publications.
- 11. Shtayeh, M.S. & Arda, M.H. (1985). Incidence of dermatophytosis in Jordan with special reference to tinea capitis. *Mycopathologia*, 92, 59-62.