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Editorial

DERMATOMYCOSES IN CATS AND DOGS AS ZOONOTIC DISEASES

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Dermatomycoses of cats and dogs are typical zoonotic diseases. The causative agents, dermatophytes, can infect man and animals and can be transmitted from animal to man and vice versa. Based on this fact dermatophytes can be classified into anthropophilic zoophilic anthropozoophilic and zooanthrophilic. The anthrophilic species are those species which infect man only; zoophilic species affect animals and when the infection can be transmitted to man are called anthropozoophilic There are however, some dermatophytes which affect both man and animals and have their habitat in soil. These are colled geophilic fungi.

As shown in **Table 1,** dermatomycoses in cats and doge are caused by 18 species of dermatophytes, of which *Microsporum canis* is the most common. In fact, cats and dogs are the usual hosts of this dermatophyte. *M. canis* is of world-wide distribution and infects, beside cats and doges, a wide range of hosts including monkey, horse, sheep, goat, rabbit, g. pig, hamster, lion and tiger (Rieth and Refai, 1964; Refai and Rieth,1965 and Refai, 1983).

The number of *M. canis* infection spreading from cats and dogs to man has been increasing in the last decade all over the world (Toeroek et al. 1982). This may be due to the increased number of cats and dogs being kept in homes or the increase of stray cats and dogs in big towns. This dermatophyte is becoming in fact a problematic human pathogen in urban areas, not only in child ren, but also in adults, where the infection was reported

Table 1: Dermatophytes recorded in cats and dogs

Dermatophyte	Cat	Dog	main host or reservori	Remark
Microsporum				
M. canis	+	+	cats and dogs	*
M. gypseum	+	+	soil	**
M. gallinae	+	+	poultry	*
M. persicolor	-	+	rodents	*
M. cookei	+	-	soil	**
M. audouinii	-	+	man	***
M. distortum	-	+	monkey dogs	*
M. nanum	-	+	pigs	*
M. vanbreuseghemii	-	+	soil	**
Trichophyton				
T. mentagrophytes	+	+	various animals	*
T. quinckeanum	+	+	rodents	*
T. rubrum	+	+	man	***
T. schoenleinii	+	+	man	***
T. verrucosum	+	+	cattle	*
T. simii	-	+	monkey, chickens	*
T. Violaceum	+	+	man	***
T. terrestre	+	+	soil	**
Epidermophyton				
E. floccosum	-	+	man	***

* Zooanthropophilic ** geophilic *** anthropozoophilic

by Van Hecke and Meysman (1980), Onsberg and Sylvest (1981) and Lieske et al (1982).

In Egypt, cats and dogs were examined mycologically almost only when *M. canis* was recovered from a human contact and the dermatophyte could be easily isolated especially when infected hairs were pulled out under U.V. light. On the other hand, El-Bahay and Refai(1973) could isolate *M. canis* from 5 out 113 apparently healthy stray dogs and cats. Merdan et al. (1974) isolated this dermatophyte from house flies collected from 2 districts in Cairo. Moreover, Refai (unpublished data) could recover *M. canis* from fleas collected from a cat suffering from ringworm.

In man, *M. canis* was isolated from 3 children, 5-6 yea old with tinea capits (Refai, 1967). Abdel-Fattah et al. (1967) found that *M. canis* came in the 3rd place (18.8 %) after *T violaceum* (53.3 %) and *T. schoenleinii*(26.7 %) as agents of tinea capitis in Egypt. El-Mazny et al. (1973) recovered *M. canis* from 14 % of cases with tinea corporis. Marouf and Rafai (1985) isolated *M. canis* from 15 out of 815 military recruits with dermatomycoses (3 cases had tinea capitis and 12 tinea corporis).

Other dermatophytes were rarely isolated from cats and dogs, although they were frequently isolated from man e.g. *T. violaceum, T. rubrum, T. mentangrophytes, T. schoenleinii,* and *E. floccosum* (Abdel-Fattah et al., 1967, Abdellah et al., 1971, El-Mazny et al. 1973 and Marouf and Refai, 1985) or from animals e.g. *T. verrucosaum* from cattle (Soliman et al., 1977) and from sheep and goat (Fouad et al., 1977). *T. equinum* from horses (Abdallah at al (1971) and *M. gallinea* from poultry (El-Batrawi and Nasser (1984). *M.*cooker and *T. quinckeanum* were isolated from soil (Refai and Rieth, 1964).

From this review it is clear that *M. canis* is the most important dermatophyte causing ringworm in cats and dogs & it is gaining an active role as an aetiological agent of tinea capitis et corporis in young and adults in Egypt. I would expect an increasing incidence of this dermatophyte in man as a result of the steadily interest of keeping such animals in the Egyptian houses.

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