



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

RODENTS FROM PET SHOPS IN COPENHAGEN POSE A RISK OF DERMATOPHYTOSIS IN PET-OWNERS

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Introduction: Dermatophytes are occasionally transferred from animals to humans causing dermatophytosis. Recently, several cases of zoophilic dermatophyte infections caused by *Trichophyton* (T.) *erinacei* and *T. benhamiae* have been observed at two major secondary care units in Denmark. These fungi have rodents as hosts and some of the patients had just acquired a guinea pig from a pet shop.

Objective: The aim of this study was to determine the prevalence of positive dermatophyte cultures from rodents in Danish pet shops, in order to clarify the magnitude of potential sources of zoophilic infections and to prevent further spread.

Materials and methods: Specimen sampling was performed in ten pet shops in Copenhagen metropolitan area from the pelt of two rabbits, two hamsters and two guinea pigs at each shop. Sampling was done using a toothbrush technique, which collects debris from the surface of the hair and skin. In order to obtain sufficient material for culturing the toothbrush was combed thoroughly over the entire hair coat until the bristles were full of hair. The toothbrushes bristles were inoculated onto dermatophyte-specific growth-media (Sabouraud-glucose-agar (SGA) supplemented with cycloheximide and chloramphenicol (SSI Diagnostica, Hillerød, Denmark)).

Results: A total of 60 samples were collected (20 guinea pigs, 20 rabbits and 20 hamsters) and 13 (22 %) were dermatophyte culture positive.

Nine of 20 guinea pigs (45%) were positive (*T. benhamiae* (*T. mentagrophytes*) complex (n=8) and *T. erinacei* (n=1)). Three of 20 (15%) hamsters were positive with *T. benhamiae* and all rabbits were negative.

Conclusion: Dermatophytes were isolated from one in five rodents. Especially guinea pigs (45%) were infected and pose a potential source of infection for the pet owners. This study





indicates that treatment of infected or asymptomatic rodents maybe necessary to prevent dermatophytosis in pet owners.

