Rising incidence of familial dermatophytosis in the Indian subcontinent – Possible risk factors

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Introduction

Dermatophytes are keratinophilic fungi responsible for skin, nail and scalp infections. There is a recent increase in the number of patients as well as chronicity of this superficial infection. The present study aims to investigate the possible contributing factors which may be responsible for the increasing spread of the infection within a family.

Questionnaire

- Demographic profile
- Number of members affected
- Site of initial infection
- Occupation
- Animal contact
- Soap / detergent to bathe / wash
- Use of over the counter drugs
- Type of lavatory in the house
- Use of same bathing stool
- Washing clothes together
- Use of same towels

Methodology

- This is a retrospective questionnaire based study
- Inclusion criteria
  - Patients of tinea cruris / corporis with at least one more family member affected
  - KOH showing branched fungal hyphae
- A total of 113 families with 673 members were included.
- Out of these, 373 were affected
- A detailed history was taken.
- Data was analyzed and correlated.

Results

- First member affected in most cases was a male member
- Initial site of infection was same in 110 families as that of the first member affected
- Spouse was always affected in all cases



Husband Wife Son

Results



Discussion

- Superficial dermatophytosis was regarded as an easy to treat infection.
- Recently multiple members in the same family are being affected which may be due to various lifestyle modifications.
- The most important being use of antiseptic soaps which kills the normal flora of the skin thus making it easy for the microorganisms to cause infection.
- The other being the use of over the counter drugs which could be responsible for decreasing the inflammatory reaction and thus persistence of infection.
- Use of same bathing stool in the Indian scenario could be one reason of cruris being the most common site of infection
- Recently increased use of washing machines could be another factor.

Conclusion

- Recent upsurge of cases of tinea and increase in recurrence within a family may be due to certain risk factors like use of antiseptic soaps , use of over the counter preparation, washing all the clothes together, using the same soap and bathing stool etc.
- Further larger studies are required to corroborate the same.