Summary and Conclusion

Dermatophytes are keratinophilic fungi causing dermatophytosis (ringworm or tinea) by their ability to degrade keratin and thus colonize and invade the skin. They belong to 3 Genera, Epidermophyton, Microsporum and Trichophyton. Their geographic distribution is dynamic and subject of changes due to population immigration, health habits and standards of living.

Topical antifungal drugs have a very limited value in clearing dermatophytosis. The high failure rate in topical treatment, specially in onychomycosis, directs attention for oral administration of antifungals, griseofulvin, fluconazole, itraconazole and terbinafine.

The development of new antifungal agents and the emergence of less susceptible filamentous fungi has made it increasingly important to distinguish one fungus from another for correct diagnosis and choice of effective antifungal agents.

So, the aim of this work is to study the prevalent dermatophytes in Qalubia Governorate.

In this study 300 patients suffering from different forms of dermatophytic infections were selected from Dermatology Outpatient Clinic of Benha University Hospital.

Skin, hair and nail specimens were collected into folded squares of paper or in sterile petridishes. Clinical materials were collected for direct microscopic examination and culture on Sabouraud glucose agar.

In this study, tinea capitis represented the most common clinical finding (38.3%), followed by Tinea unguium (25%), tinea corporis (13.3%), tinea pedis (8.3%), tinea cruris (6.7%), tinea faciei (3.4%), tinea manum (3%) and tinea barbae (2%).

Direct examination of 300 specimens using KOH (20%) preparation was positive in 99 (33%) of cases while the culture method is positive in 251 (83.6%) and the difference between the 2 methods of diagnosis was stastically highly significant.

In this study the 300 collected specimens were cultured on SGA (Sabouraud glucose agar) incorporate chloramphenicol to inhibit bacteria and cyclohexamide to inhibit saprophytic molds. It is positive in 251 (83.6%) specimens and negative in 49 (16.4%) specimens. Dermatophytes isolated included Genera of

Trichophyton (68%), Microsporum (7.6%) and Epidermophyton (8%).

In tinea capitis the isolated dermatophytes are T.violaceum (54.7%), M. canis (17.3%), T. mentagrophytes (10.4%), T. tonsurans (7.1%), T.rubrum (1.7%) and no isolated E. floccosum.

CONCLUSIONS:

- T. capitis is the prevalent form of dermatophytosis in Qalubia Governorate.
- Direct diagnosis of dermatophytes by 20% KOH is rapid (within minutes) and simple method but insensitive and non specific its accuracy was (43.3%).

- Culture on SGA, although prolonged time is required; is the method of choice for isolation and identification of dermatophytes and hence choice of correct therapy.

- Prevalent dermatophytosis in Qalubia Governorate, were tinea capitis, tinea unguium, tinea corporis, tinea pedis, tinea cruris, tinea faciei, tinea manum and tinea barbae.

- Prevalent dermatophytes in Qalubia Governorate; were T.violaceum, T. mentagrophytes, T. rubrum, E.floccosum, M.canis, and T.tonsurans.

- In tinea capitis the isolated dermatophyte species were T.violaceum, M.canis, T.mentagrophytes, T.tonsurans, and T.rubrum.

- In tinea unguium the isolated species were T.mentagrophytes, T.rubrum, T.tonsurans, E.floccosum and T.violaceum.

- Bad habits and lack of immunity are the predisposirg causes of dermatophytosis.