Summary and conclusion

Dermatophytosis (tinea or ringworm) of the scalp , glabrous skin, and nails is caused by a closely related group of fungi known as dematophytes which have the ability to utilize keratin as a nutrient source , I . e they have a unique enzymatic capacity (keratinase) .

The disease process in dermatophytosis is unique for two reasons:

Firstly , no living tissue is invaded the keratinized stratum corneum is simply colonised . however , the presence of the funguus and its metabolic products usually induces an allergic and inflammatory eczematous response in the host . the type and serverity of the host response is often related to the species and strain of dermatopyte causing the infection .

Secondly , the dermatopytes are only fungi that have evolved a dependency on human or animal infection for the survival and dissemination of their species .

The inicidence of dermatopytosis is on the increase every day. The disease is more common in poor countries and lower standards of hygiene .

The aim of this work was to identify dermatopytes in different clinical forms using three types of selective media to evaluate the efficacy of eache on of them .

1- Sabouraud , s dextrose agar supplemented with cycloheximide and chloramphenicol.
2- Sabouraud – gentamicin – chloramphenicol containing (SGC) 50 mg-ml gentamicin .
3- Sabouraud gentamicin – chloramphenicol containing (SGC) 100 mg-ml gentamicin.

This study involved fifty cases suffering from different forms of dermatophytosis . they selected from the el.enini hospital during the period from November 2008 to may 2009 . were subjected to clinical examination .

The specimens were collected in petri dishes or piece of paper .

Then direct microscopic was done using koh 10-20 % or lactophenol cotton blue stain , and SDA +CC ,SGE containing 50 mg-ml gentamicin and SGC containing 100 mg-ml gentamicin . thye were incubated at 25-30c temperature for up 3 weeks period .

The colonies were stained with lactophenol cotton blue , and examined microscopically. The findings were observed on SDA+CC and SGC (100) mg-ml gentamicin the number of positive dermatophyte isolates were 28 (56.0%) , the most common was M . audouinii 13 cases (46.42%) followed by T. verrucosum 5 cases (17.8%) , and M. canis 5 cases (17.8%) , and the least prevalent species was E. floccosum being only one case (3.5%) , while , on SGE (50)mg-ml gentamicin. Seven (50%) of 14 cases were found to be M. audouinii, followed by T verrucosum and M. canis .

From the current study we can concluded that :

- Epidemiological finding :
  1- M. audouinii is an anthropohilic isolate , so prevention of crowdedness , imporovement of hygiene standard , and health education to avoid sharing objects such as hairbrushes , combs, clothes , towels and bedding will help greatly in avoiding such infection

2- T. verrucosum and M . canis are zoophilic , so avoidance of direct contact with a diseased animal (cattle , cat) or indirectly by infected animal hair carrid on clothing or present in contaminated stalls , barns or feed , my combat these kinds of infection .

3- E. floccosum was least prevalent species , this may be because the patients with onychomycosis less keen to seek medical advise .

- Diagnostic Media :

1- Microscopic examination with lactophenol is highly effective then direct microscopic examination in indication the presence of dermalophytes .

2- SGC containing 100 mg-ml gentamicin was superior to SGC containing 50 mg-ml gentamicin in recovery of dermatophytes .

3- All dermatophytes exhibited the same rate of growth on SDA +CC and SGC containing 100 mg-ml gentamicin , typical colony morphology , pigment formation and microscopic characteristics as in SDA+CC . but formation of conidia was better in SGC .

Therefore SGC can replace in the near future SDA+CC in isolation of dermatophytes , as this media is cheaper more available and gives good results.