SUMMARY & CONCLUSION

Ashokan K Kuttyil “Study on the prevalence of subcutaneous mycoses in north Kerala”, Department of Microbiology, Medical College Calicut, University of Calicut, 2006
Subcutaneous mycoses comprise a heterogeneous group of fungal infections which are characterized by development of lesions at the site of implantation of etiological agents in the subcutaneous tissues. These infections primarily involve the dermis and subcutaneous tissue and rarely disseminate into systemic diseases. These infections usually develop from the implantation of ubiquitous organisms into the skin through trauma and are most commonly found in tropical areas. Similar to other mycoses, immunosuppressed patients are at increased risk for these infections. The main subcutaneous mycoses are chromoblastomycosis, phaeohyphomycosis, mycetoma and sporotrichosis. Other less common subcutaneous mycoses are zygomycosis, lobo mycosis, and rhinosporidiosis. These uncommon diseases have been reported from almost all the continents, but majority of cases are from tropical and subtropical regions.

In the present study period, out of total 161542 cases of skin diseases, 7497 cases of fungal etiology were noticed. It was 4.64% of total study group. From the 7497 patients with various fungal etiologies, only 192 patients were clinically diagnosed as subcutaneous mycosis. (2.56%) of total population. Higher incidence of infections were noticed in the age group of 31-40(39), followed by the age group, 41-50(37). In this study male patients outnumbered (132) female patients (60). In male patients, high incidence of infections were noticed in the age group of 41-50 (27), followed by 51-60(26) and 31-40 (25). In female patients, a higher incidence were was in the age group of 21-30 and 31-40 (10 each).

Of the 192 cases of subcutaneous mycosis, 50 cases of chromoblastomycosis (26%) were identified. Fungal isolations were obtained in 40 cases (80 %) Phaeohyphomycosis were identified in 10 cases (5.2 %) and fungal isolations were positive in all cases. Hyalohyphomycosis were identified in 8 cases (4.16 %) and fungal isolations were obtained in 6 cases (3.1 %). Mycetoma was identified in six
cases (4.16 %) and fungal isolations were obtained in all cases. Unusual site infections were seen in five cases (2.6 %) and rhinosporidiosis was confirmed in three cases (1.56 %).

So according to the present study, the commonest subcutaneous mycoses prevalent in the hilly areas of north Kerala is chromoblastomycosis followed by phaeohyphomycosis. In chromoblastomycosis *Fonsecaea pedrosoi* is the common infecting agent and it is isolated in 19 cases (38%), followed by *Cladosporium carrionii* in 15 (30 %) cases. So according to this study, chromoblastomycosis due to *F. pedrosoi* is prevalent in this area. The next common species is *Cladosporium carrionii*. *Fonsecaea dermatitidis* and *Xylohypha bantiana* were isolated in two cases each. *F. compacta* and *Black yeast* were isolated in one case each.

Compared to chromoblastomycosis, phaeohyphomycosis is less prevalent in this area. Total ten cases have been reported during the study period (5.2%). Fungal isolations were obtained in eight cases (80 %). The important fungal isolates were *Aureobasidium* and *Ramichloridium* in two cases. *Curvularia, Cheatomium, Torula and Phoma were isolated* in one case each. In the present study, eight cases of hyalohyphomycosis were identified (4.1%). Fungal isolations were obtained in five cases (62.5 %). The important fungal isolates were *Acremonium* in two cases. *Scedosporium apiospermum, Penicillium marneffei* and *Streptomyces* in one case each.

During the study period, six cases of mycetoma cases were identified (3.1%). Fungal isolations were obtained in all cases. The important isolates were *Scedosporium apiospermum* and *Acremonium* in two cases, *Streptomyces* and *Aureobasidium* in one case each. During the study period three cases of rhinosporidiosis were identified.

*Invitro* antifungal studies showed, terbinafine have good antifungal activity against *F. pedrosoi* and *Cladosporium carrioni* and patients showed good response.