



DERMOSCOPY AND SKIN IMAGING

TRICHOSCOPIC FEATURES OF TINEA CAPITIS IN 98 CHILDREN: AN OBSERVATIONAL ANALYTIC STUDY

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Background: Tinea capitis (TC) is the most common pediatric dermatophyte infection. Fungal culture, the diagnostic gold standard takes several weeks. Non-invasive tool-trichoscopy helps in rapid diagnosis and prompt treatment of TC would prevent horizontal transmission.

Objectives: To document different trichoscopic feature of TC and to correlate with clinical, microscopic variant and the etiological fungus.

Methods: We conducted a study applied to 98 consecutive subjects of age ≤ 18 years that attended our outpatients. Clinical examination, hair root for KOH mount microscopy and culture, and trichoscopy was performed after taking consent. Griseofulvin and terbinafine were given to 46 and 52 children respectively. Chi-square and unpaired T-test were used to compare baseline qualitative and quantitative data.

Results: Most common clinical variety of TC was black dot (46.93%). Trichophyton violaceum (86.27%) was predominant isolates among 51/98 mycological culture positive cases. Trichoscopy of TC showed black dot (82.65%), comma hair (57.14%), short broken hair (53.06%), perifollicular scaling (46.93%), corkscrew hair (32.65%), horse shoe hair (16.32%; new finding) and zigzag hair (15.30%). Black dot ($p=0.006$) and short broken hair ($p=0.36$) were predominant trichoscopic feature in non-inflammatory and inflammatory variant respectively. Both these features could be indicative of TC severity. Comma hair ($p=0.005$) were predominantly seen in Trichophyton violaceum infected TC. Comma ($p=0.007$), corkscrew ($p=0.007$), zig zag ($p=0.011$) and horse shoe hair ($p=0.045$) were predominantly seen in endothrix form.

Conclusion: Trichoscopy is a useful bedside tool for diagnosis of TC in children that obviates the need of diagnosis by fungal culture with a sensitivity of 98.97%. It may be helpful in determining activity and severity of TC. Horse shoe hair was a new finding observed predominantly in black dot clinical variant of TC and require validation in future trichoscopic studies of TC.

