



DERMOSCOPY AND SKIN IMAGING

STUDY OF DERMOSCOPIC ARTEFACTS IN SKIN OF COLOR

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INTRODUCTION: Dermoscopy allows a simple in vivo evaluation of morphologic structures of the epidermis, the dermoepidermal junction, and the papillary dermis. Artefacts are elements encountered during a scientific procedure which are unintentionally present and hinders with the normal morphology and hence results in diagnostic dilemma.

AIM: To evaluate various dermoscopic artefacts and correlate the same in select dermatological disorders localised to scalp and face.

MATERIAL & METHODS: A prospective cross-sectional study of patients suffering from select dermatological disorders (Androgenetic Alopecia, Diffuse pattern alopecia, Alopecia Areata, Telogen Effluvium, Scarring Alopecia, Melasma, Exogenous Ochronosis, Lichen planus pigmentosus, Pigmented contact dermatitis, Post inflammatory pigment alteration) were included and examined for any artefacts on dermoscopy examination. Dermoscopic variables included were Instrument related, Observer related and external application related viz. fibres, threads, particles, dyes, colouring material, sunscreen, cream and materials used in various cultural practices.

RESULTS: Out of 6736 patients, the incidence of artefacts in our study was 2.8% with male to female ratio 1:1.6. 98 patients had various artefacts seen over hair and scalp. The most common artefact was minoxidil crystals (13%) followed by hair dye (10%). Among artefacts over face, sunscreen was the most common (18%) followed by creams(13%).

DISCUSSION: Since artefacts may interfere with evaluation and diagnosis of different dermatological disorders, every dermoscopist should be well aware with their presence and their types. Artefacts may arise due to various reasons like external applications, seasonal effects and cultural practices. Face and hair being the most exposed part of the body, exogenous particles (personal application and foreign material) have highest tendency to come in contact. Season related artefacts seen in our study were dirt, henna, holi colour and sunscreen while vermilion and hair oil application were related with the local cultural practices.

