



DERMOSCOPY AND SKIN IMAGING

# DERMOSCOPY OF TOPICAL STEROID DAMAGED FACE (TSDF) - DIAGNOSTIC FEATURES VALIDATED FROM A CROSS SECTIONAL STUDY OF 244 PATIENTS

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**Background:** The incidence of topical steroid-damaged face (TSDF) resulting from abuse of over-the-counter (OTC) topical corticosteroids (TCS) is rising. Dermoscopy as a diagnostic-cum-prognostic tool for TSDF was published for the first time in indexed literature by the author.

**Objective:** To evaluate and validate the role of Dermoscopy in the diagnosis of TSDF.

**Materials and Methods:** A cross-sectional study involving 244 Indian patients with TSDF diagnosed on history of TCS (3 months+) and/or clinical features of TSDF (sensitive skin, photosensitivity, wrinkled-appearance, dyspigmentation, gross hypertrichosis, unexplained acne/rosacea). Patient details recorded - history of TCS (duration, potency) and clinical features. A 1 × 1 cm<sup>2</sup> area over malar prominences evaluated dermoscopically with DermLite IV (polarized). Features evaluated - erythema (grade 0-3), tortuous branching blood vessels (TBBV) (scale - number/image), ivory-white areas (IWA) s/o atrophy (proportion of the image area in percentage), hypertrichosis (grade 0-3), and any other specific findings. Fischer's exact test with P value of <0.05 as level of significance used for statistical analysis.

**Results:** Demographic essentials of 244 patients - M:F = 215 (88%):29 (12%), mean age - 34.7±2.3 years. Reason for TCS application - dull complexion (168=69%), melasma (44=18%), and acne (32=13%). TCS potency used - clobetasol, mometasone, and desonide in 36%, 56%, and 8% respectively. Mean application duration - 9.4±4.1 months. Dermoscopic features - erythema (100% cases; grade 2 in 81%), TBBV - median number/image 15 (range 8-23), IWA [mean %age image area involved = 62.3±9.8], hypertrichosis (100% cases; grade 2 in 75%). Other findings - comedonal acne (49=20%), nodulocystic acne (25=10%), rosacea-like eruption with 'demodex tails' (42=17%), and features of melasma (37=15%). Dermoscopy features with statistical significance with clinical presentation - erythema (p = 0.017); TBBV (p = 0.034); IWA (p = 0.041), hypertrichosis (p = 0.017), and acneiform eruption (p = 0.033).





Conclusions: Erythema, TBBV, IWA, hypertrichosis, and acneiform eruptions represent diagnostic findings of TSDF on Dermoscopy.

