PIGMENTATION

PERI-ORBITAL ACQUIRED DERMAL MACULAR HYPERPIGMENTATION: A DISTINCTIVE CLINICAL ENTITY IN YOUNG ADULTS - CASE-CONTROL STUDY

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Background: Acquired dermal macular hyperpigmentation (ADMH) presenting at peri-orbital region has been described in younger age groups as individual case reports. Peri-orbital hyperpigmentation is also prevalent among younger age groups. A better understanding of peri-orbital ADMH helps to avoid misdiagnosis of this entity.

Objective: To evaluate the clinical, dermoscopic and histopathologic features of peri-orbital ADMH, and to compare its clinico-epidemiological features with ADMH per se.

Materials and Methods: This was a retrospective case-control study. We reviewed the data of ADMH patients who attended our pigmentary clinic during January 2016-December 2017. Demographic and clinical details of peri-orbital ADMH (subjects) cases were compared with that of ADMH without peri-orbital involvement (controls). Moreover, clinical, dermoscopic and histopathological features of subjects, recruited during the study period, were prospectively evaluated.

Results: Total 19 subjects (11%) were identified among 177 ADMH patients. Peri-orbital ADMH patients had a relatively younger age of onset (23.26±11.06 vs. 36.16±13.41, $p<0.001$). There was no significant difference between the subjects and controls in other parameters. Dermoscopy of subjects in the early phases of disease onset showed only imperceptible speckled blue-grey dots that accentuated and easily identified at outer-corner creases of eyes (the ‘outer-corner crease sign’). Histopathology of the lesions showed vacoular degeneration of basal layer, melanin incontinence and perivascular lymphocytic infiltrates. Pooled data of 177 cases showed following results: incidence (19/177, 11%), mean age at onset – 23 years, male:female = 6:13; mean duration of illness – 21 months; distribution confined to head and neck (11/19). Treatment response was poor in the majority, (14/19). Most (12/19, 63%) cases were misdiagnosed initially as acanthosis nigricans or fixed drug eruption.

Conclusions: Peri-orbital ADMH should be considered as a differential of peri-orbital hyperpigmentation in children and young adults. Dermoscopic evaluation of outer corner creases of eyes may help to rule out this entity in its early presentation.