Research Article

Study of wood’s lamp and dermoscopic features of melasma.

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Abstract

Background: Melasma is the main cause of facial hyperchromia and has a significant psychosocial impact. Aim of the study: determine type of melasma according to depth of melanin. Research methodology: this is observational descriptive study, included patients with melasma with different pattern of involvement. Results: three clinical pattern of melasma are observed clinically, 81% present progressive course, 42.42% diagnosed mixed melasma by Wood’s light, and 72.72% by Dermoscopy. Conclusion: Wood’s light, Dermoscopy can used as a diagnostic tool in melasma.

Keywords: Melasma.

Introduction

Melasma is an acquired hypermelanosis of sun exposed areas commonly seen in women, it can also occur in men. It presents as symmetrical hyperpigmented macules and patches commonly over the cheeks, nose, chin and forehead (Balkrishnan et al., 2006; Gupta et al., 2006).

Research methodology:

Study design: this is an observational descriptive study was conducted among patients attending outpatient clinic of

Table (1): age, course and relation to sun exposure and pregnancy among melasma patients

<table>
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<tr>
<td>Age (mean± SD)</td>
<td>24-50(35.2±6.6)</td>
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<tr>
<td>Course (progressive)</td>
<td>27 (81%)</td>
</tr>
<tr>
<td>Relation to sun exposure</td>
<td>16 (48.5%)</td>
</tr>
<tr>
<td>Relation to pregnancy</td>
<td>16 (48.5%)</td>
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As shown in Table (1), the study conducted in female patients whose age ranges between 24-50 years with a mean of (35.2±6.6), Almost 81% present progressive course, 48.5% related to excessive sun exposure and pregnancy.

Table (2): mixed melasma by Wood’s light and Dermoscopy.

<table>
<thead>
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<th>Method</th>
<th>No</th>
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<tr>
<td>Wood’s light</td>
<td>14 (42.42%)</td>
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<tr>
<td>Dermoscopy</td>
<td>24 (72.72%)</td>
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Table (2): mixed melasma by Wood’s light and Dermoscopy.
Discussion
Melasma is a symmetric progressive hyperpigmentation of the facial skin that occurs in all races but has a predilection for darker skin phenotypes (Perez, 2005). Melasma predominantly affects Fitzpatrick skin phototypes III and IV and often lasts for many years after pregnancy (Sheth and Pandya, 2011).

The diagnosis of melasma is usually made clinically and is rather straightforward due to its characteristic appearance. Wood’s light and dermoscopy are used as a method of melasma classification (Tamler et al., 2009). Wood’s light is a low output mercury arc covered by a Wood filter (barium silicate and 9% nickel oxide), and emits wavelength 320–400nm (peak 365 nm) (Gupta and Singhi, 2004).

Therefore, it seems that the clinical use of wood’s light is not accurate in determining the level or the depth of melanin pigment in melasma, and skin biopsy may be an attractive option in detecting clearly the depth of pigment (Kang and Ortonne, 2010). Dermoscopy is a non-invasive technique, a proven reliable tool for direct visualization of skin pigmentation (Piccolo et al., 2006).

Conclusion
Dermoscopy is more suitable for examination for melasma, since it allows visualization of pigmentary components in a more objective way. It also helps to understand the prognosis and management.

References