Original Research Paper

Dermatology

CLINICO-EPIDEMIOLOGICAL STUDY OF MELASMA

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ABSTRACT
Background: Melasma is an acquired increased pigmentation of the skin, characterized by gray-brown symetrical patches, mostly in the sun-exposed areas of the skin. The pathogenesis is unknown, but genetic or hormonal influences with UV radiation are important. **Methods:** A prospective observational study was performed on 50 patients that were enrolled for the study over a period of one year. All patients with melasma were evaluated clinically, and under the Woods lamp. **Result:** The mean age of patients was 36.91 +/- 6.82 years, ranging from 16 to 54 years. The male to female ratio was 1:4. About 54% of our patients reported that their disease exacerbated during sun exposure. A positive family history of Melasma was observed in 20% patients. Centrofacial was the most common pattern (54%) observed in the present study. Woods lamp examination showed the dermal type being the most common in 48%. **Conclusion:** The exact cause of melasma is unknown. However, many factors have been implicated in the etiopathogenesis of this disorder.

KEYWORDS :

INTRODUCTION

Melasma (a term derived from the Greek word 'melas' meaning black) is a common, acquired hypermelanosis that occurs in sun-exposed areas, mostly on the face, occasionally on neck, and rarely on forearms.

Melasma is a very common cutaneous disorder, accounting for 0.25 to 4% of the patients seen in Dermatology Clinics in Southeast Asia, and is the most common pigment disorder among Indians.[1,2]

The exact causes of melasma are unknown. However, multiple factors are implicated in its etiopathogenesis, mainly sunlight, genetic predisposition, and role of female hormonal activity.

Exacerbation of melasma is almost inevitably seen after uncontrolled sun exposure. Genetic factors are also involved.

The hyperpigmented macules and patches may range from single to multiple, usually symmetrical on the face and occasionally V-neck area.

Using the Wood's lamp examination, melasma can be classified into 3 types depending upon the depth of pigment deposition (epidermal, dermal or mixed).

METHODOLOGY

A prospective observational study was performed on 50 patients diagnosis with melasma that were enrolled for the study over a period of one year.

All patients with melasma were evaluated clinically, and under the Woods lamp.

The demographic data regarding age at present, age of onset of melasma, sex, duration of the disease, and family history were noted.

The data of different predisposing factors like sun-exposure, pregnancy, cosmetics, ovarian tumor, and other endocrinal diseases were noted, and relevant investigations were carried out to rule out the same.

Clinical evaluation was done and depending upon the distributions of lesions, they were divided into centrofacial, malar, or mandibular.

Inclusion Criteria

This study included all consecutive patients diagnosed with melasma

Exclusion Criteria

Those with other pigmented lesions, and uncontrolled endocrine abnormalities were excluded

RESULTS

1)The mean age of patients was 36.91 +/- 6.82 years, ranging from 16 to 54 years.
2)The male to female ratio was 1:4, suggestive that melasma may be related to hormonal imbalances related to estrogen and Progesterone
3)Overall, 20% (10/50) of the patients had a family history of the disease
4)About 48% of the patients had a disease chronicity of >3 years.
5)About 54% of our patients reported that their disease exacerbated during sun exposure
6)Centrofacial was the most common pattern (54%) observed in the present study
7) Woods lamp examination showed the dermal type being the most common in 48%

Table 1; Age ,gender Distribution And Family History In Melasma

Parameter	Males N=10	Females N=40
Age (years, mean ± SD)	34.3 ± 8.9	38.6 ± 7.7
Family history	3	7

Figure 1: Patients Having Chronicity Of Disease
<3 years 48%
>3 years 52%

FREQUENCY
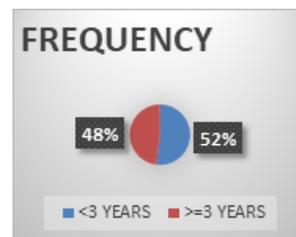48%   52%
■ <3 YEARS ■ >=3 YEARS

Figure 2 shows centrifacial melasma

DISCUSSION

Kumar et al. showed maximum number of patients (64%) in 20–39 years age group and higher female-to-male ratio of 6.4:1[3]

Achar et al showed 33.33% had a family history of melasma .About 55% female patients presenting early (i.e., between 20 and 30 years of age) had a family history of melasma similar to a study done in Brazilian women[4,6]

KrupaShankar et al.showed significant sun exposure in 70% of patients   in the study. .The Singapore study gave history of sun exposure in 26.8% patients.[5,1]

A study done in Pune by Pawar et al. had malar type as most common, whereas in the study by Achar and Rathi and Qazi et al centrofacial was more common, similar to the findings of our study[7,4,2]

Achar et al observed that Wood's lamp examination showed the dermal type being the most common in 54.48% and epidermal and mixed were seen in 21.47% and 24.03% of the cases, respectively.[4]

CONCLUSION

melasma is the most common facial hypermelanosis seen in practice. Melasma demands concern and treatment due to social and cosmetic reasons. Large clinical data provide a clear picture as to patterns and associations of melasma .The present study highlights key elements such as   familial distribution, and environmental triggers in a study group of 50 melasma patients.

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