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# Facial Melanosis a Prospective Study of the Etiological **Factors**

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#### **ABSTRACT**

Among 162 cases diagnosed with facial melanosis, 104 cases had melasma, 10 patients were diagnosed with pigmentation demarcation line; among these all 10 (6.5%) 6 cases were diagnosed to have Seborrhoeic melanosis. 46 (28.4%) cases had positive history of exposure to Drugs/Heavy Metals/Cosmetics and 116 (71.6%). 8 cases were diagnosed to have post inflammatory hyperpigmentation, among these all 6 (13.0%) cases had positive history of Exposure to Drugs/Heavy Metals/Cosmetics and 2 (1.7%). Fifteen cases were diagnosed to have periorbital hyper melanosis. Among these 6 (13.0%) cases had positive history of Exposure to Drugs/Heavy Metals/Cosmetics and 9 (7.8%) and 16 cases were diagnosed to have paraphenylenediamine dermatitis. Only 6 cases were diagnosed to have Seborrhoeic melanosis. Majority of the patients affected with facial melanosis. We have observed a close association of facial melanosis with different predisposing factors such as sun exposure, pregnancy, cosmetic use, ovarian tumor, atopy, iron deficiency and other endocrine diseases.

Key words: Melanosis, Hyperpigmentation, Inflammation

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# INTRODUCTION

Facial melanosis is always a troubling issue to patients. Although there is better advancement and newer techniques been introduced in the field of dermatology and aesthetic medicine this facial melanosis remains a big challenge [1-3]. Hence a thorough knowledge on the etiological factors is needed to treat and prevent these diseases. The aim of this study is to evaluate the etiological factors causing facial melanosis.

### **METHODOLOGY**

# Study design

This study will include 150 patients with facial melanoses at ending the outpatient department of Dermatology and Venereology in Sree Balaji Medical College and Hospital in the period of 2013 to 2015, after written informed consent.

### Inclusion criteria

Patients of all ages who present with facial melanoses.

### **Exclusion criteria**

Patients who refused to give consent will be excluded from the study.

- Pregnant or lactating women.
- Patients with chronic debilitating diseases.
- Patients receiving psychotropic drugs.

A questionnaire will be used to record the name, age, sex, detailed history of the complaints, exposure to sunlight, use of cosmetics, family history, drug history and other associated symptoms. Then each patient will undergo detailed general physical, systemic and dermatological examination.

The diagnosis of facial melanosis will be made on clinical grounds and detailed history regarding the causative factors, relevant investigations including Wood's lamp examination, Skin biopsy and PPD dye patch test will be done wherever necessary. Photographs will be taken for documentation.

A study group of 150 patients with facial melanoses at ending the outpatient department of Dermatology and Venereology taken for the study. The diagnosis of facial melanosis will be made on clinical grounds and detailed history regarding the causative factors, relevant investigations including Wood's lamp examination, Skin biopsy and PPD dye patch test will be done wherever necessary.

## RESULTS AND DISCUSSION

Among 162 cases diagnosed with facial melanosis, 104 cases had melasma, among these 100 (75.2 %) cases were females and 4 (13.8 %) cases were males, and 10 patients were diagnosed with pigmentation demarcation line, among these 7 (5.3 %) were females, and 3 (10.3%) were males. 3 cases were diagnosed to have Riehl's melanosis. Among these 2 (1.5%) were females and 1 (3.5%) were males. When performing a Comparison of history of exposure to drugs, heavy metals, cosmetics in facial melanosis, certain patients were diagnosed to have two conditions of facial melanosis coexisting with each other. Overall, 46 (28.4%) cases had positive history of Exposure to Drugs/ Heavy Metals/ Cosmetics (Figure 1) and 116 (71.6%) did not. Overall, 46 (28.4%) cases had positive history of other associated conditions and diseases in facial melanosis and 116 (71.6%) did not. In our study, majority of the patients affected with facial melanosis were females' Earlier studies conducted by Bhutani et al. and Vega et al. have also reported female preponderance. Earlier studies conducted by Bhutani et al. [3-10]. And Vega et al. Have also reported its occurrence at a similar age group in their patients. In the present study we have observed a close association of facial melanosis with different predisposing factors such as sun exposure, pregnancy, cosmetic use, ovarian tumor, atopy, iron deficiency and other endocrine diseases. Besides these findings a detailed history, thorough clinical examination and skin biopsy will be able to give diagnosis in most of the cases.

Figure 1: Comparison of history of exposure to drugs/heavy metals/cosmetics in facial melanosis.

## CONCLUSION

Facial melanosis causes cosmetic disfigurement with significant emotional impact. Its treatment includes identifying the etiological factors and removal of these provoking factors, vigorous Photoprotection, and some form of active pigment reduction either with topical

agents or physical modes of treatment. Avoidance of provoking factors like causative cosmetic and textile in Riehl's melanosis; perfumes in Berloque dermatitis and mustard oil massage in LPP, etc. are needed.

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