

Original Research Article

A clinical study of facial dermatoses

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ABSTRACT

Background: The attractiveness of the human body has always been an important issue in the fields of sociology, psychology, psychiatry and also in the field of dermatology. Because in most societies the face is usually a body part that is visible, imperfections of its skin is also visible, therefore its flawed appearance bears the potential to become a source of misery to some. The objective of the study was to study the various dermatological conditions affecting the face.

Methods: A cross-sectional study was conducted among 200 patients with facial dermatoses during the period Dec-2014 to May-2016. Patients belonging to age group 12 years and above and both sexes were randomly selected and included in the study after taking their consent.

Results: Out of the facial dermatoses, 75 patients had infections of the face comprising 37% of the total facial dermatoses with tinea faciei being the most common individual facial skin condition comprising 18%. Skin tumors and cysts and miscellaneous conditions of the face comprised 15% each of the total facial dermatoses. This was followed by contact dermatitis (9%), photodermatoses (8.5%), Rosacea in 5.5% of patients, Nevi in 5% of patients and pigmentary disorders being the least common facial dermatoses comprising 4.5%.

Conclusions: It is worthwhile to take note of the special nature of facial skin and the disorders that affect it.

Keywords: Facial dermatoses, Tinea faciei, Clinical study

INTRODUCTION

The attractiveness of the human body has always been an important issue in the fields of sociology, psychology, psychiatry and also in the field of dermatology. Because in most societies the face is usually a body part that is visible, imperfections of its skin is also visible, therefore its flawed appearance bears the potential to become a source of misery to some.¹

The skin lesions affecting face are generally termed as "common inflammatory facial dermatoses". This group comprises of conditions of the skin like "acne vulgaris (AV), papulopustular rosacea (PPR), erythematote-

langiectatic rosacea (ETR), perioral dermatitis, seborrheic dermatitis (SD), and atopic dermatitis (AD)". Some features of all these dermatoses which are visible to the naked eyes, may look similar on seeing the patient. But each and every dermatoses mentioned above are unique in terms of their clinical presentation. Also they are distinct in terms of their pathogenesis. But in the pathogenesis also some aspects can be found to be similar. The treatment for the conditions like eczematous dermatoses as well as seborrheic dermatitis is the use of steroid of topical nature. But this appears to be short term. The topical steroids should be discontinued as early as possible to prevent the side effects that occur generally due to constant use.²

Dermoscopy has been shown to be useful till now only for the melanocytic lesions which appeared to be equivocal on examination by the naked eye or the lesions which are based on the clinical atypia. But a different approach may be required for facial pigmented lesions when doing dermoscopy. This is because most of such lesions are not exactly of melanocytic type.³

For dermatoses like acne vulgaris which are inflammatory in nature, much research work has given the recommendations for their management. There are data approved by US-FDA which suggest the availability of the treatment protocol for inflammatory dermatoses of the face. But for dermatoses of the face where we find the rosaceaform lesions, the treatment only depends upon the previously published literature.⁴

The peculiar and unique nature of the facial skin and the various disorders that may present on it beckons a detailed study of it. Also, there are very few studies pertaining to facial skin conditions and thus a need for this study.

METHODS

Study design

Hospital based cross-sectional study.

Study place

Department of Dermatology, Venereology and Leparology, Karnataka Institute of Medical Sciences, Hubli, Karnataka.

Study period

December 2014 to May 2016.

Sample size

200 patients with facial dermatoses belonging to age group 12 years and above and both sexes were randomly selected and included in the study after taking their consent.

Ethical aspects

Institutional Ethics Committee permission was taken. Informed consent was taken from the study subjects.

As per the study questionnaire which was pre tested and semi structured, history and examination of all the patients included in the present study was carried out and recorded in the study questionnaire. All patients underwent dermatological examination as well as systemic examination.

Appropriate investigations and histopathological examinations were conducted for selected patients

wherever applicable. Photographs of all the patients were taken in such a way that only their lesions were highlighted obscuring their identity.

Patients with melasma, leprosy and acne, patients previously diagnosed and treated for facial skin disorders, patients with sole involvement of the lips and oral cavity and patients not willing to give consent were excluded from the study.

The results of the study were tabulated and analyzed. Simple proportions and percentages for comparing different variables like age, sex etc., were used. Chi-square test was used for finding any statistical association between various variables. Final outcome was expressed as the percentage of facial skin disorders among the study group as a whole and as the percentage of individual facial skin disorders.

RESULTS

200 patients satisfying the inclusion criteria were enrolled in the study. The various observations were noted as follows:

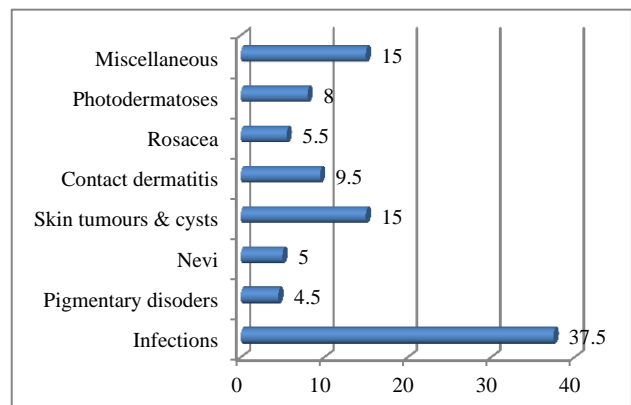


Figure 1: Incidence of facial skin disorders.

Out of the facial dermatoses, 75 patients had infections of the face comprising 37% of the total facial dermatoses with *Tinea faciei* being the most common individual facial skin condition comprising 18%. Skin tumors and cysts and miscellaneous conditions of the face comprised 15% each of the total facial dermatoses. This was followed by contact dermatitis (9%), photodermatoses (8.5%), rosacea in 5.5% of patients, nevi in 5% of patients and pigmentary disorders being the least common facial dermatoses comprising 4.5% (Figure 1).

In the present study, it was found that majority of the patients belonged to the age group 13-22 yrs (32.0%), followed by 23-32 yrs (24.0%), 33-42 yrs (18.0%), 43-52 yrs (12.5%), 53-62 yrs (7.0%). Least incidence was in the age group above 72 yrs (1.0%) followed by the age group of 63-72 (5.5%). It was found that the distribution of age with facial dermatoses was statistically significant ($p < 0.05$) (Figure 2).

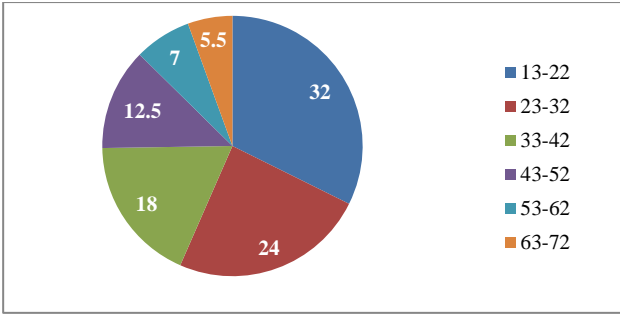


Figure 2: Age distribution.

Table 1: Sex distribution of the study subjects.

| Sex | No. of patients | Percentage (%) |
|----------------|-----------------|----------------|
| Males | 104 | 52.0 |
| Females | 96 | 48.0 |
| Total | 200 | 100.0 |

In the present study, it was found that there was an increased male preponderance (52.0%) comparing to females (48.0%) (Table 1).

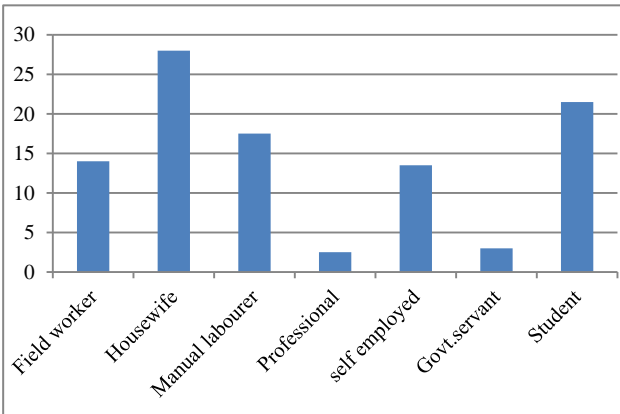


Figure 3: Occupational pattern.



Figure 4: Molluscum contagiosum in a HIV patient.

In the present study, the majority of the patients (28.0%) were housewives by occupation followed by 21.5% students, 17.5% manual labourers, 14.0% field workers, 13.5% were self-employed, 3% govt. servants and 2.5% being professionals. The distribution of the facial dermatoses with occupation was found to be statistically significant ($p < 0.05$) (Figure 3).



Figure 5: Tinea faciei.



Figure 6: Chronic actinic dermatitis.

DISCUSSION

Jain et al carried out a study among 150 patients who were having dermatoses on the face at the outpatient department.⁵ They found that 26.7% of the cases were having pigmentary disorders. The most common etiology of the pigmentation was found to be melasma. Acne was found to be the second leading etiology in 16.7% of the cases. Other dermatoses which were found in their study were cyst, eczema and naevi. These findings are in accordance with the finding of the present study. The author stated that the prevalence of the facial dermatoses was associated with the factors like social class, awareness, area of residence, conditions of the climate, etc.⁵

Gupta et al studied the hospital records of the patients who were diagnosed with facial hypermelanoses. They included only male patients.⁶ They collected data on various factors. Skin biopsy was also carried out. There were a total of 300 male subjects in this study. They were aged between 18-74 years. They found that there were 40.3% of the cases in the age group of 31-50 years. But we found that in the present study there were only 30% cases in this age group. The most common cause was found to be melasma in 76.7% of the cases. But we found that infections were the most common cause of the facial dermatoses in 37.5% of the cases. The author noted that 10.7% of the cases were having hypermelanoses around the orbit, 8.7% of the cases were having lentigenes and freckles, and 4% of the cases were having acanthosis nigricans and noted that it was associated with obesity and diabetes. The authors concluded that the most common causes of facial hypermelanoses were melasma.⁶

Isidore et al carried out a study on facial dermatoses over a period of five years.⁷ During this period a total of 7898 cases were seen who were above the age of 18 years. Out of these 7898 cases seen, the incidence of facial dermatoses was 15.1% in their study. Around 3% of the cases had more than one facial dermatoses. The most common was pigmentary in almost 25% of the cases. But in the present study we found that only around 5% of the cases were having pigmentary facial lesions. Thus this finding of the author in their study does not match with the finding of the present study. In females the most common facial dermatoses was ochronosis followed by seborrheic dermatitis. The authors concluded that pigmentary lesions were common in their study due to depigmentation practices prevalent in their study area cases.⁷

Georgieva et al carried out a follow up study on 52 cases of facial dermatoses.⁸ They tried to evaluate the quality of life associated with facial dermatoses among these patients before and after treatment. They found that the quality of life score was 11.83 before treatment which reduced to 8.86 after treatment. The author did not find any relation between "severity of facial dermatoses and the degree of their improvement and quality of life".

They concluded that wellbeing of the patients is adversely affected by the body image and self esteem.⁸

Zhao et al studied the relation between demodex mite and facial dermatoses.⁹ The prevalence of demodex infestation was 43%. The authors noted that age more than 30 years has been found to be a risk factor for the demodex as the rate of infestation was more among those aged above 30 years of age than among those who were less than 30 years of age. Another risk factor found was type of skin like mixed type of skin more susceptible to demodex than those with neutral type of skin. The authors recommended that good hygiene of the face may prevent infestation with demodex.⁹

CONCLUSION

The present study was undertaken with a view to look into the various conditions affecting face and their different presentations. Recognition and characterization of individual facial skin disorder has been sluggish as compared to many other skin disorders.

A study compiled in one department, can never reflect in full measure, the true magnitude of the problem. However the study does serve, to give a perspective of the problem and to gain insight into the subject. To conclude, a study with a wider and larger population is necessary to understand the epidemiology of facial dermatoses.

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Conflict of interest: None declared

Ethical approval: The study was approved by the institutional ethics committee

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