

Clinicoepidemiological Study of Facial Dermatoses in a Tertiary Care Hospital in South India

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Abstract

Background: The face is the most prominent, visible part of the body. The obsession for a flawless skin is increasing in both sexes and all age groups. The appearance of face provides identity to the person. Any spot or lesion, especially over the face, can be alarming and draws the attention of the people. However, these problems are seldom given enough importance. Very common problems such as acne vulgaris and melasma can cause serious psychological impact.

Aims and Objectives: The objective of the study was to study the clinical pattern and epidemiological determinants of facial dermatoses among the patients of both the sexes, involving all the age groups.

Materials and Methods: Two hundred and fifty patients with facial dermatoses presenting to skin department of a tertiary care center in Bachupally, Hyderabad, are selected for the study. Study design is descriptive and cross sectional, conducted from October 2022 to Febraury2023.

Results: 250 consecutive patients with newly diagnosed facial dermatosis attending outpatient department are examined and data were recorded. In this study, most common facial dermatoses are pigmentary disorders (41.4%), of which melasma constituted the most common, followed by acne, rosacea, and perioral dermatitis (24.4%). 14.8% are infections and 11.6% are eczemas. There is a wide variation in the age group of the cases. In this study, we observed that maximum number of cases is students.

Conclusion: Facial dermatoses are of a major cosmetic concern in all age groups and both the sexes. Early diagnosis and proper management with the education of patients is important to prevent potential disfiguring complications and psychological sequelae. This study provides an insight into various aspects of facial dermatoses encountered in day-to-day practice.

Key words: Acne, Dermatoses, Melasma, Pigmentary disorders, Rosacea

INTRODUCTION

The self-esteem, psychological well-being, and social interactions of an individual are significantly impacted by the face.^[1] As the face is usually a body part that is visible in most societies, imperfections of its skin are also visible; therefore, its flawed appearance bears the potential to become a source of misery to some.^[2] The appearance of face provides identity to the person. Lesions on the facial skin evoke anxiety and concern to the patient forcing him to seek early medical

attention. Facial skin diseases can have a tremendous impact on a person's quality of life in general. The face extends superiorly from the hairline in adolescence, inferiorly to the chin and mandible base, and on either side to the auricle.^[3]

Facial skin differs significantly from the skin of the other regions of the body. The facial skin is studded with most numerous sebaceous glands and small hair follicles, making it prone to the development of dermatoses associated with pilosebaceous units. The epidermis is very thin, and melanocytes are numerous. The rete ridges pattern at dermoepidermal junction is often very poorly developed, which makes a distinction between papillary and reticular dermis often difficult to assess.^[4] Exposure to various climatic conditions has a major and obvious influence on the incidence, type, and natural history of facial dermatoses. The peculiar and unique nature of the facial skin and

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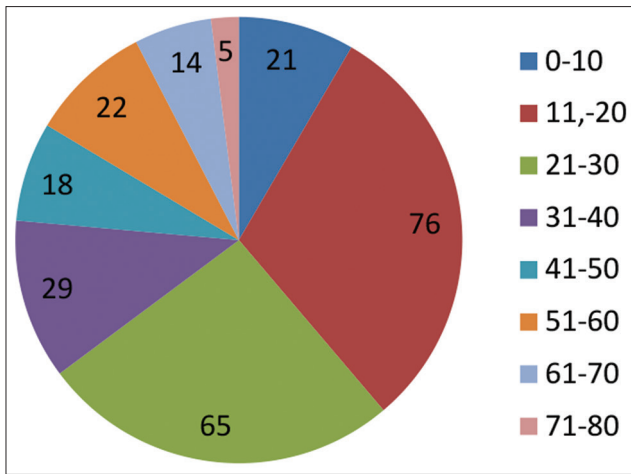


Figure 1: Age distribution of patients



Figure 4: Mid-facial distribution of Melasma

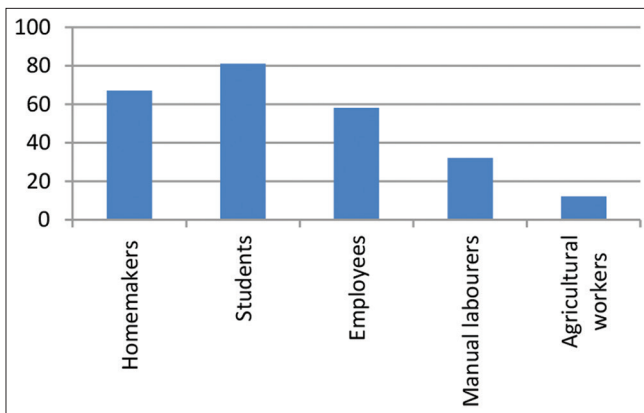


Figure 2: Chart showing occupational pattern



Figure 5: A child with atopic dermatitis



Figure 3: A case of lip vitiligo



Figure 6: Keratoacanthoma over the cheek

the various disorders that may present on it beckons a detailed study of it. Therefore, it is essential for the early identification and management of facial skin disorders.

There are very few clinical studies of facial dermatoses done in this part of India, and hence this cross-sectional

study is conducted in a tertiary care hospital at Bachupally, Hyderabad of Telangana State. The objective of the study is to study the various dermatological conditions affecting the face.

MATERIALS AND METHODS

A total of two hundred and fifty patients of all age groups and both the sexes, with facial dermatoses presenting to skin department, at Mamata Academy of medical sciences, Bachupally, are screened after obtaining informed written consent. A detailed clinical history including onset and evolution of lesions, socioeconomic factors, and environmental background of the patients are noted for the study. Study design is observational and is conducted over 5-month duration. They are assessed by available demographic and etiological data, detailed history, and clinical examination. The findings are recorded in a pre-designed pro forma. Investigations, including the skin scrapings for potassium hydroxide mount, woods lamp examination, skin biopsy, and relevant investigations, wherever required, are done.

Patients and/or their guardians not giving consent; patients with drug reaction, seriously ill patients, and sexually transmitted infections are excluded.

Ethical clearance is obtained before commencing the study.

Data Entry and Analysis

Data are entered in Microsoft Excel sheet. The results of the study are tabulated and analyzed. Simple proportions and percentages for comparing different variables such as age and sex are used. Final outcome is 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

250 patients satisfying the inclusion criteria are enrolled in the study. Various observations are noted as follows:

In the present study, it is found that the majority of the patients belonged to the age group of 11–20 years (30.4%), followed by 21–30 years (26%), 31–40 years (11.6%), 51–60 years (8.8%), 0–10 years (8.4%), and 41–50 years (7.2%). Least incidence is in the age group above 70 years (2.0%), followed by the age group of 61–70 (5.6%) [Table 1 and Figure 1].

In the present study, it is found that there is an increased female preponderance (52.8%) compared to males (47.2%) [Table 2].

In the present study, the majority of the patients (32.4%) are students, followed by 26.8% housewives/homemakers, 23.2% employees, 12.8% manual laborers, and 4.8% agricultural workers [Table 3 and Figure 2].

Table 1: Age distribution of patients

Age group	Number of patients	Percentage
0–10	21	8.4
11–20	76	30.4
21–30	65	26
31–40	29	11.6
41–50	18	7.2
51–60	22	8.8
61–70	14	5.6
71–80	5	2
Total	250	

Table 2: Sex distribution of patients

Sex	Number of patients	Percentage
Males	118	47.2
Females	132	52.8
Total	250	100

Table 3: Occupational pattern

Occupation	No. of cases	Percentage
Home makers	67	26.8
Students	81	32.4
Employees	58	23.2
Manual laborers	32	12.8
Agricultural workers	12	4.8

Table 4: Incidence of facial skin disorders

Facial dermatoses	Number of cases	Percentage
Infections	37	14.8
Pigmentary disorders	103	41.2
Nevi	6	2.4
Acne, rosacea, perioral dermatitis	61	24.4
Eczemas	29	11.6
Cysts and tumors	3	1.2
Miscellaneous	11	4.4

Of the 250 patients included in this study, 103 (41.2%) patients had pigmentary disorders [Figures 3 and 4]. Among the pigmentary disorders, melasma is the most common, followed by post-inflammatory hyperpigmentation and periocular pigmentation.

This is followed by acne, rosacea, and perioral dermatitis cases which amount to 61 (24.4%) patients.

Infections category includes patients suffering from Tinea faciei, Pityriasis versicolor, Herpes labialis, Molluscum contagiosum, Furunculosis, and Hansen's disease. There are 37 (14.8%) patients in this group.

Eczemas include cases of pityriasis alba, seborrheic dermatitis, Bindi dermatitis, atopic dermatitis [Figure 5], phytphotodermatitis, and cheilitis. 29 patients (11.6%) are in this group.

Conditions which are included in miscellaneous skin disorders are milia, perioritis, hirsutism, urticaria, and DLE. There are 11 patients (4.4%) in this group.

6 patients had nevi (2.4%). 3 patients had cysts and tumors (1.2%) [Figure 6] over the face.

These findings are depicted in Table 4.

DISCUSSION

In the present study, it is found that the majority of the patients belonged to the age group of 11–20 years (30.4%). In the study conducted by Bhagwat *et al.*, it is found that the majority of the patients belonged to the age group of 13–22 years (32.0%).^[5] Sharada and Ashok found the majority of cases 24 (24.0%) in the age group of 20–29 years.^[6]

In the present study, the majority of the patients (32.4%) are students, followed by 26.8% housewives/homemakers, 23.2% employees, 12.8% manual laborers, and 4.8% agricultural workers. These findings are similar to the study conducted by Sharada and Ashok which showed that maximum patients are students by occupation, i.e., 38% followed by housewives 29%.^[6]

Of the 250 patients included in this study, 123 patients had pigmentary disorders. Among the pigmentary disorders, melasma is the most common, followed by post-inflammatory hyperpigmentation and periocular pigmentation.

The findings of this study are similar to the study conducted by Kavya and Nataraj^[7] on facial hypermelanosis, in which melasma is the most common pigmentary disorder. In the study conducted by Sharada and Ashok, out of 100 cases, 26% are pigmentary disorders of which melasma constituted the most common.^[6]

Jain *et al.* carried out a study among 150 patients who are having dermatoses on the face at the outpatient department. They found that 26.7% of the cases are having pigmentary disorders. The most common etiology of the pigmentation is

found to be melasma. Acne is found to be the second leading etiology in 16.7% of the cases. Other dermatoses which are found in their study are cyst, eczema, and nevi.^[8] These findings are in accordance with the finding of the present study. Hassan *et al.*, found melasma is the most common pigmentary disorder.^[9] Chintada *et al.*'s conducted a study of facial dermatoses in women. Their study found that, of the 500 patients, 355 patients had pigmentary disorders. Among the pigmentary disorders, melasma is the most common.^[10]

CONCLUSION

This cross-sectional study is undertaken to assess the nature and extent of the involvement of the face in various dermatoses in male and female population at different ages and occupational status. In the present study, it is found that the majority of the patients with facial dermatoses belonged to the age group of 11–20 years (30.4%), most of them being students (32.4%). Female preponderance of facial dermatoses (52.8%) was noted. Among the pigmentary disorders, melasma was the most common, followed by post-inflammatory hyperpigmentation and periocular pigmentation.

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