



A Clinical Study of Facial Dermatoses in a Tertiary Care Teaching Hospital

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ABSTRACT

Background

Face is cosmetically important area of the body .Any change in colour or appearance of rash over face affects the individual both in psychologically and social angle.Each facial dermatoses have its own clinical presentation. Prevalence of skin diseases affecting general population varies from 7.86% to 11.16%.(1)Therefore a detailed knowledge about the dermatoses affecting the face is important.

Aim

To study the patterns of various dermatoses affecting

the face.

Objective

To study the demographic profile of patients with facial dermatoses.

To study the clinical patterns of facial dermatoses.

Methodology

A cross sectional Observational study was done in Viswabharathi Medical College and Hospital for a period of 6 months. 100 consecutive patients who are willing to participate in the study were included.

Detailed history and examination was done .Results are tabulated and analysed.

Results

Out of the 100 study population 27% were having pigmentary disorders followed by infections 22%, diseases of pilosebaceous unit 19%, miscellaneous 7% Eczemas 6%, CTD 3%, Genodermatoses 2%.

Conclusion

The purpose of this study was to evaluate the type and degree of facial involvement in diverse dermatoses at varying age and gender.

Keywords

Facial Dermatoses, Pigmentary Disorders, Infections.

INTRODUCTION

Aesthically, the face is the most noticeable feature on the body. In general the skin lesions that afflict the face are called facial dermatoses. Every one cares about how they look, which enables them to project confidence when they interact with others. The patient may experience stress due to the obvious visibility of facial lesions(2,3). Even a single facial lesion can result in anxiety and if it persists for an extended period of time, it can trigger reactive depression and negatively impact one's self esteem and subsequent ramifications(4). Facial skin differs from skin of other regions of the body as it is thinner, rich sebaceous gland and has smaller hair follicles than that of scalp .(5) The prevalence, type and natural History of facial dermatoses are also significantly and clearly influenced by exposure to the fluctuations of the climate . A thorough investigation of the facial skin is warranted due to its peculiar and unique characteristics as well as the range of illnesses that may manifest on it.

AIM

To study the patterns of various dermatoses affecting the face.

OBJECTIVE

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MATERIALS AND METHODS

Study Design

Cross sectional Observational study.

Study Period

6 Months from March 2023 to August 2023.

Sample Size: 100

Inclusion Criteria

1. Patients willing to give informed consent and participate in the study.
2. Patients with facial lesions.
3. Patients with the facial lesion, as a part of the generalised dermatological disorder.

Exclusion Criteria

1. Patients who are already on treatment for facial dermatoses.
2. Patients not willing to give informed consent.
3. Patients with skin lesions secondary to trauma
4. Patients with sole involvement of mucosa of oral cavity, lips or conjunctiva.

All patients who presented with the primary symptoms suggestive of facial dermatoses attending OPD of DVL department of Viswabharathi Medical College and Hospital were subjected to detailed history and clinical examination. Photographs were taken after obtaining informed consent. Relevant investigations were done where ever necessary.

Facial dermatoses were categorized into

| S.No. | Condition | Diseases |
|-------|--------------------------------|--|
| 1 | Diseases of pilosebaceous unit | Acne, Rosacea |
| 2 | Pigmentary Disorders | Melasma, Freckles, lentigenes, LPP, Acanthosis, Vitiligo, Nevus of Ota, Reils Melanesia. |
| 3 | Eczematous Disorders | Seborric Dermatitis, Allergic Contact Dermatitis |
| 4 | Infections | Bacterial- Folliculitis, Lupus vulgaris, Hansen's. Viral - Herpes simplex, Herpes Zoster, Molluscum contagiosum, Wart. Fungal - T. Faciei, T. barbae, T. Versicolor. |
| 5 | Connective Tissue Disorders | SLE, Scleroderma, Dermatomyositis. |
| 6 | Skin Tumours | Seborric Kerasotes, DPN, Syringoma, <u>Trichoepithelioma</u> , pilomatricoma , BCC, SCC, Malignant Melanoma. |
| 7 | Genodermatoses | Neurofibromatosis, Tuberous sclerosis. |
| 8 | Miscellaneous | Milia, xanthelesma, Psoriasis, Lichen planus, polymorphic light eruption, photo allergic, photo toxic Dermatitis, Phempigus foliaceus. |

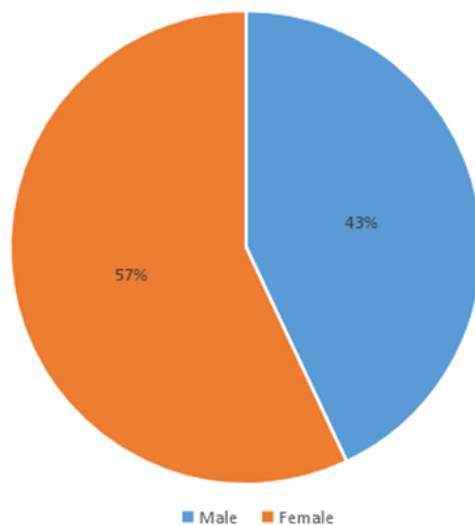
Statistical Analysis

Data collected from all the patients were tabulated and results are analysed using SPSS software version 23.

Observations and Results

In the present study it was found an increase in female preponderance (57%) comparing to male (43%).

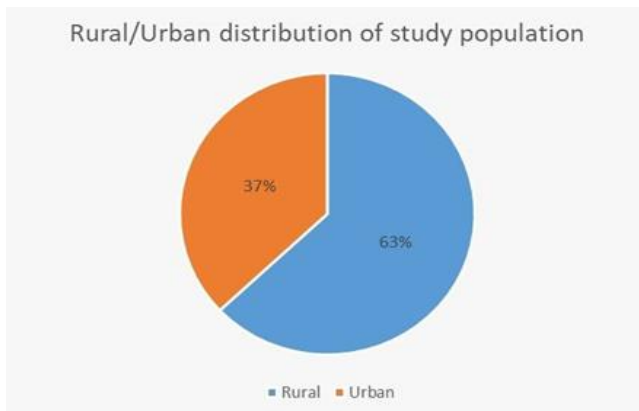
sex distribution of the study population



The majority of cases enrolled in the study was in age group of 20-29 years with 27% followed by 30-39y with 24%, 40-49yrs 15%, 10-19yrs 11%, 50-59yrs 9%,60-69 Yrs 8%, 0-9yrs 4%, 70-79yrs 2%

| Age group | Percentage of Study Population |
|-----------|--------------------------------|
| 0-9 | 4 |
| 10-19 | 11 |
| 20-29 | 27 |
| 30-39 | 24 |
| 40-49 | 15 |
| 50-59 | 9 |
| 60-69 | 8 |
| 70-79 | 2 |

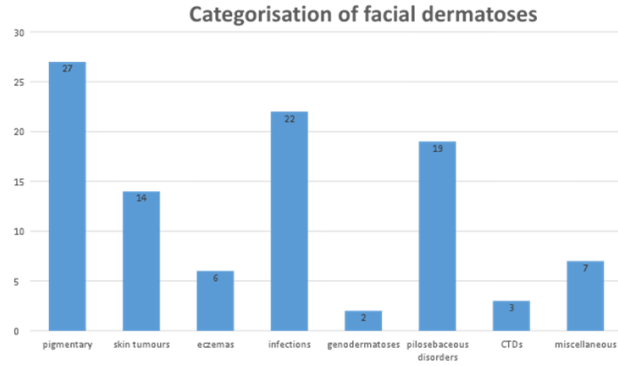
In this study we observed maximum number of cases belongs to rural (63%) when compared to Urban (37%).



In the present study majority of patients were Housewives (29%), followed by students (21%), manual workers (17%), field workers (14%), self employed (12%), Govt. servants (4%), professionals (3%).



Out of 100 patients in this study, 27% were pigmentary disorders of which melasma was most common 18% . Infections account for 22% with T.faciei being commonest with 9% . Diseases of pilosebaceous unit, accounts for 19% with acne being the most common 17%. Skin tumours accounts for 14%, Eczemas 6%, CTD for 3%, Genodermatoses for 2% miscellaneous for 7%.



IMAGES



Figure 1: Melasma



Figure 2: Post Inflammatory Hyper Pigmentation



Figure 3: Lichen Planus Pigmentosus



Figure 4: Vitiligo



Figure 5: Herpes Simplex



Figure 6: Herpes Zoster



Figure 7: Impetigo



Figure 8: Leprosy



Figure 9: Tinea faciei



Figure 10: Pityriasis Versicolor



Figure 11: Nodulocystic Acne



Figure 12: Contact Dermatitis (Kunkum)



Figure 13: Systemic Lupus Erythematosus



Figure 14: Seborrheic Keratoses



Figure 15: Basal Cell Carcinoma



Figure 16: Adenoma Sebaceum (Tuberous Sclerosis)



Figure 17: Lamellar Ichthyosis



Figure 18: Phempigus Foliaceous



Figure 19: Milia



Figure 20: Xanthelesma Palpebrum

DISCUSSION

Face remains one of the main area of concern both in healthy and diseased, facial appearance provides primary identity to an individual. Facial skin is more prone to UV rays, allergens, infections and cosmetic usage when compared to other parts of the body. Any lesions on the face provoke anxiety in patient to seek early medical attention.

The various dermatological conditions that affect the face are pigmentary disorders, pilosebaceous diseases, infections, eczema, CTD, immune bullous disorders. Although some of the diseases are limited to face only, on the other hand some can be the early manifestations of systemic diseases. Therefore early identification of these disease can help in proper management.

In our study majority of cases are under the group of pigmentary disorders accounting for 27%, of which melasma (Figure 1) was the most common pigmentary disorder observed 18 cases followed by periocular hypermelanoses, post-inflammatory hyperpigmentation (Figure 2), facial Acanthosis, Lichen planus pigmentosus (Figure 3), and Vitiligo (Figure 4).

Among infections which accounts for 22% fungal infections(t. faciei (Figure 9) seen in 9 cases) was highest followed by viral(Herpes simplex(Figure 5), H.zoster (Figure 6), Molluscum contagiosum)and bacterial infections(impetigo(Figure 7) and Hansen's disease (Figure8)).

19% of the study population have pilosebaceous unit disease with acne (Figure 11)being the most common one in 17 cases.

Skin tumours accounts for 14% of which DPN , Seborric keratoses(Figure14) , Basal cell Carcinoma

(Figure15), Trichoepithelioma in descending order of frequency.

In our study Eczemas accounts for 6 %cases of which contact allergic dermatitis (Figure 12)seen in 3 cases , seborric dermatitis in 2 cases and perioral dermatitis in 1 case.

3% of cases are under the group of CTD's, SLE malar rash(Figure 13) seen in 2 cases and SS in one case.

Genodermatoses accounts for 2% of which 1 was Neurofibromatosis with neurofibromas over face and 1 case was Tuberous sclerosis which had adenoma sebaceum (Figure 16) involving nasolabial area and cheeks.

In miscellaneous group which comprises 7% of cases ,milia(Figure 19)was seen in 2 cases , PMLE in 2 cases, Lamellar Ichthyosis(Figure 17) in 1 case, Phempigus foliaceus(Figure 18)in 1 case, xanthelesma palpebrum(Figure 20) in 1 case.

Jain et al carried out a study among 150 patients who were having dermatoses on the face at the out patient department. They found that 26.7% of the cases were having pigmentary disorders. The most common etiology of the pigmentation was found to be melasma.second leading etiology in 16.7% cases was acne. Age wise 30.67% of facial dermatoses presented in the 3rd decade of life. In our study we observed pigmentary disorders was the highest with 27% of which melasma was the commonest with 15% Similar to jain etall.with 27% of facial dermatoses observed in age group 20-29yrs with female preponderance of 57%.(6)

Gupta et al studied the records of the patients diagnosed with facial hypermelanoses. There were a total of 300 male subjects in the study. They were aged between 18-74 years .40.3% cases were in the

age group of 31-50. The most common cause was found to be melasma in 76.7% of cases. The author concluded that most common causes of facial hypermelanoses was melasma. In our study 39% cases were in the age group of 30-50yrs.(7)

Isidore et al carried out a study on facial dermatoses over a period of 5 years a total of 7898 cases were enrolled above the age of 18 years. The most common was pigmentary disorders in almost 25% of cases . In our study pigmentary disorders was the highest accounting for 27% similar to the study(8)

Melasma was the most common facial melanoses in our study forming 66.6% (18) of pigmentary disorders where as in study conducted by Hassan et all it accounts for 40%.(9)

Seborric keratoses was more in female (3 cases)when compared to male(2cases) with a female to male ratio of 1.5:1 similar to study done by Besrael et al with a ratio of 1.2:1(10)

CONCLUSION

This study was done to assess the various dermatoses affecting the face. There is paucity of comprehensive studies of facial skin disorders as a group. This study provides insight into various facial dermatoses that encountered in a day to day practice.

ABBREVIATIONS

DVL: Dermatology, Venerology, Leprosy.

OPD: Outpatient department.

CTD: Connective Tissue Diseases.

T.faciei: Tenia faciei.

H.Zoster: Herpes Zoster.

DPN: Dermatitis papulosa nigra.

PMLE: polymorphic light eruption

SLE: Systemic Lupus Erythematosus

SS: Systemic Sclerosis.

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