Original article:

Clinico-epidemiology of facial dermatoses

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Abstract

Facial appearance provides identity to a person. The individual has to face the world with his or her face. The appearance of texture and complexion of facial skin need no emphasis. A study was conducted to find out prevalence of various facial dermatoses in various age groups, sex distribution and complication arising out of it at a tertiary care hospital at Jaipur.

The study was carried out at a tertiary care hospital at Jaipur. On 150 patients it included patients attending OPD of facial dermatoses of both sex groups, of all age group.

Pigmentary disorders were the commonest dermatoses affecting the face (26.67%),out of these melasma was the most common cause of pigmentation. Acne and related disorders (16.67%) were the second most common, Followed by infectious dermatosis (15.34%). Eczema, Naevi and cyst were other dermatosis affecting the Face.

The study was undertaken to assess the nature and extent of involvement of face in various dermatoses at different age.

Prevalence of facial dermatoses varies with the level of awareness, socioeconomic status, geographic area, climatic condition and various other factors. This study represents different aspects of facial dermatoses encountered in day to day practice.

Key words: Dermatosis, Prevalence

INTRODUCTION

Face remains the main area of concern in health as well as disease. 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. There is exponential increase in use of topical medicaments and cosmetic on face that can contribute to the cause of facial lesions.During the various phases of development in life the agerelated alterations in the structure and function of the skin.

MATERIALS AND METHODS

This is an analytical, observational study on patients attending the OPD of Dermatology at a tertiary health care in Jaipur, From January 2017 to August 2017 on 150 patients with facial lesions.

All patients attending opdfor facial dermatoses of both sex of all age group were included. Unwilling patients were excluded from the study .Data was analysed to derive age and sex wise pattern of facial dermatoses.

RESULTS

Present study was carried out to determine the frequency and nature of the dematological disorders occurring on the face and to find out their age-wise frequency and distribution. A total of 150 patients were seen. Pigmentary disorder formed the most common facial dermatoses (26.67%) followed by acne, rosacea and perioral dermatitis (16.67%).If we see age wise 30.67% of facial dermatoses presented in the 3rd decade of life followed by

18.67% in the 4th decade, 17.34% in the 2nd decade, 10% in the 1st decade, 9.34% in the 5th decade, 4% in the 7th decade, 2% in the 8th decade and 1.34% during infancy. A slight female preponderance with female to male ratio 1.2:1 was observed.

Two patients (1.34%) had genodermatosos which included Xerodermapigmentosum and poikiloderma. Eight patients (5.34%) had various types of naevi out of which five had melanocytic nevus. Three patients (2%) had disorder of keratinization. Only one patient (0.67%) had lichen planus, on the face. Thirteen patients(8.67%) suffered from eczemas. The maximum numbers were in the age group of 21-30 (30.7%). The most common type of eczema occurring on the face was allergic contact dermatitis consisting of 6 patients. Five patients had photodermatosis which included polymorphous light eruption, photodermatitis, chronic actinic dermatitis, actinicchelitis and sunburn one case each. Infections were most common during the 1st and 3rd decades of life (56%).Out of 23 patients of infections, viral infections formed the major group consisting of 12 cases. Fungal infections in 6 patients and bacterial infections were seen in 5 patients. Three patients were suffering from vesiculobullous disorders out of which 2 had pernphigus vulgaris and one had bullous phemphigoid. Acne, rosacea and perioral dermatitis were seen in 25 (16.67%) patients. Acne waScommonly seen in the 2nd and 3rd decades of life with average age of presentationat 23.1 years. Noninflammatory acne (Grade I) was present in 4 patients, inflammatory acne (Grade II,III,IV) was present in 18 patients, Rosacea was seen in 2 patients and perioral dermatitis in one patient. Connective tissue disorder was seen in 3 (2%) patients. Cysts and tumours were seen in 15 patients (10%) patients. In which milia and dermatos is papulosa nigra were most common with 6 patients each. With an average age of presentation at 28.65 years and 48.29 years respectively. Dyspigmentation was the most common disorder affecting the face in this study comprising of 40 patients (26.67%). Melasma was seen in 14 patients and was the most common cause of pigmentation. The average age of onset was at 33.13 years. Post inflammatory hyperpigmentation was seen in 7 patients. Acquired facial hypermelanosis in 2 patients. Occupational melanosis was noted in 2 patients. Freckles and lentigenes were present in 2 patients. Vitiligo was most common of hypopigmented disorder, affecting 7 patients with an average age at 26.5 years. Xanthelasmapalpebrum was seen in 3 (2%) patients who had diabetes mellitus and dyslipidemia. Drug reactions were seen in 3 patients (2%) ranging from rash to toxic epidermal necrolysis. Two patients (1.34%) presented with miscllaenous disorder in which one female with angioedema and one with Fordyce's spots.

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TABLE 1- PATTERN OF FACIAL DERMETOSES

Sr no.	Group of disorders	No.	%
1.	Genodermetoses	2	1.34
2.	Naevi	8	5.34
3.	Keratinization Disorders	3	2
4.	LP and Lichenoid disorders	1	0.67
5.	Eczemas	13	8.67
6.	Photodermetoses	5	3.34
7.	Infectious	23	15.34
8.	Vesicobullous disorders	3	2
9.	Acne, rosacea, perioral dermatitis	25	16.67
10.	Cysts and tumors	15	10
11.	Connective tissue disorders	3	2
12.	Pigmentary disorders	40	26.67
13.	Metabolic and nutritional disorders	3	2
14.	Systemic diseases	1	0.67
15.	Drug reaction	3	2
16.	Miscllaneous	2	1.34
	Total	150	100

TABLE 2- AGE WISE DISTRIBUTION OF FACIAL DERMATOSES

Group of disorders/Age	<1	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	Total
Genodermetoses	-	-	-	1	1	-	-	-	-	2
Naevi	0	1	3	2	1	1	-	-	-	8
Keratinization Disorders	-	2	-	1	-	-	-	-	-	3
LP and Lichenoid disorders	-	-	-	-	1	-	-	-	-	1
Eczemas	1	1	2	4	1	1	1	1	1	13
Photodermetoses	-	-	1	2	1	1	-	-	-	5
Infectious	-	7	3	6	2	2	2	1	-	23
Vesicobullous disorders	-	-	-	1	2	-	-	-	-	3
Acne, rosacea, perioral dermatitis	-	-	5	13	2	2	1	1	1	25
Connective tissue diseases	-	-	1	1	1	-	-	-	-	3
Cysts and tumors	1	-	2	3	3	2	2	1	1	15

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Pigmentary disorders	-	2	8	10	12	4	3	1	-	40
Metabolic and nutritional disorders	-	-	-	-	-	1	1	1	-	3
Systemic diseases	-	-	-	1	-	-	-	-	-	1
Drug reaction	-	2	1	-	-	-	-	-	-	3
Miscllaneous	-	-	-	1	1	-	-	-	-	2
Total	2	15	26	46	28	14	10	6	3	150
Percentage	1.34	10	17.34	30.67	18.67	9.3	6.34	4	2	100

TABLE 3- AGGRAVATIN G FACTORS ASSOCIATED WITH FACIAL DERMATOSES

Disease	Photoaggravation	Seasonal aggravation	Both
LP	1	1	1
Eczema	1	-	-
Photodermatoses	6	3	3
Rosacea	2	2	2
CTD	2	1	1
Pigmentary disorder	9	6	6
Syringomas	-	2	-
Total	21	15	13
Percentage	14	10	8.6

DISCUSSION

The present study included 150 patients of facial dermatosisto determine the frequency and nature of the dermatological disorders occurring onface and their age-wise distribution. 110 out of 150 patients (73.34%) had lesions limited to the face whereas 40 (26.67%) had disease affecting other areas in addition to face.

Of 150patients 82 (54.67%) were females and 68(45.34%) were males. A slight female predominance to male was seen in the male to female ratio of 1.2:1.Major group of disorder affecting the females was pigmentary disorder (36.59%) whereas male presented with acne and related disorders (22%) and infections (21%). Maximum patients were seen in second and third decade of life which appears to be due to awareness and exposure to infective agent, as well as environmental cosmetic insult. Minimum duration of complains for facial dermatosis was 12 days and maximum was 78 years. Pediatric age group mainly had infectious disorder over face. At puberty acne was the cause of concern. One patient (0.67%) of polycystic ovarian disease (PCOD)had acne and hirsutism.

One case of epilepsy had sturge weber syndrome with hypertrophy of the left half of the face.

Pigmentary disorders were the most common affecting the face comprising 40(26.67%) patients.

Out of these Melasma was the most common cause of pigmentation seen in 14 (33.34%) patients in our study. The average age of onset was 33.13 years. Most of the female patients correlated the onset of melasma with pregnancy.

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Post inflammatory hyperpigmentaton was seen in 7patients mostly post acne. Periorbitalhypermelanosis affected 4 patients and was associated with pallor in 25%. Average age of presentation was 21 years. Acquired facial hypermelanosis, Occupational Melanosis, Freckles and lentigenes were present in 2 patients each.

Vitiligo- Most common of the hypopigmented disorders, affected 7patients. The average age of presentation was 26.5 years.

Pityriasis Alba caused hypopigmentation over the face in 2patients. Average age of presentation was 8 years. Acne was most commonly seen in the 2nd and 3rd decades of life. The average age of presentation was 23.10 years. Cunliffe and Simpson reported an incidence of 95% and 83[1]% of acne vulgaris in 16 year old boys and girls. True late onset acne was seen in 23.73% patients with average age being 30. 07 years in the present study. However Poli F documented prevalence of late onset acne in 41%[2]cases. The discrepancy may be attributed to only females being studied by Poli F et al.

Most common type of eczema occurring on face was allergic contact dermatitis consisting of 6 patients. Allergy to kumkum and bindi was seen in 3 (50%) patients. These findings are consistent with the findings of Jagannath et al with the incidence of 45% [3].Most common during the 1st and 3rd decades of life.Twelve (52.17%) out of the total 23 had viral infections and molluscumcontagiosurn was the commonest. Fungal infection was seen in 6 (26%)patients in whom Tinea faciei was the commonest. Bacterial infections were noted only in 5 (21.7%)patients and Impetigo was the commonest**.** Most common in this group was pemphigus vulgaris with 2 patients and 1 had bullous pemphigoid. Wereseenin 15 (10%) patients,Milia and dermatosis papulosa nigra were commonest with 6 patients each, with an average age of presentation at 28.65 years and 48.29 years respectively.

However, Harrison MA reported an incidence of 39% in his study. Three patients (2%) ofXanthelasmapalpebrum also had raised LDL. Psoriasis with facial involvement was seen in 2 patients.

CONCLUSION

This study was undertaken to assess the nature and extent of the involvement of the face in various dermatoses at different age and sex. Though the prevalence of various diseases is well known, very few studies exist which have studied face involvement in these.

The patients seen in our study were cross sectioned from all age group, both sexes, different socioeconomic status, as well as various geographical areas.

It is thus felt that this study provides an insight into various aspects of facial dermatoses encountered in day to day practice.

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