

Original Research Article

A clinico-epidemiological study of facial dermatoses in women

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Abstract

Background: The face is the most prominent part of the body. Facial blemishes and disorders directly reflect on patients' physical appearance, cosmesis, and self-image. They may contribute to dysmorphism and even lead to depressive illness in susceptible individuals, especially women. Therefore, it is essential for the early identification and management of facial skin disorders. **Aims:** To study the clinical pattern and epidemiological determinants of facial dermatoses among females above ten years. **Materials and Methods:** This cross-sectional study was conducted in a rural tertiary hospital from January 2019 to December 2019 among 500 female patients with Facial Dermatoses with their consent. Investigations, including the skin scrapings for potassium hydroxide mount, woods lamp examination, skin biopsy, and relevant investigations, wherever required, were done. Females above the age of 10 years with facial dermatoses were included with due consent/ assent. Patients with drug reactions and sexually transmitted infections (STIs) were excluded. **Results:** Out of the total 500 cases enrolled, most were in the 4th (22%) and fifth (19%) decades. Patients with only one facial dermatosis were 321 (64.2%), whereas 179 (35.8%) patients had more than one dermatoses. Among the facial dermatoses, pigmentary dermatoses were highest 355 (71%), with melasma predominating. The least common were immunobullous dermatoses 5 (1%). In the study, many facial dermatoses, especially melasma, were related to occupation and lifestyle with the patients giving a history of photo-aggravation, stress, and cosmetics use. Occupation-wise, agricultural workers were the major group of 196 (38%), followed by housewives with 154 (30%) out of 500. **Conclusion:** The subject is complex, as the term facial skin disorder includes a large heterogeneous group of disorders, but no precise classification exists. Opinions vary regarding the conditions to be included under facial dermatoses. This study is an effort to fill this gap in understanding facial dermatoses, which have a significant bearing on physical and mental well-being and the Dermatological Quality of life (DLQI) among the female clientele.

Keywords: Facial dermatoses, Women, pigmentary dermatoses

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Introduction

The face extends superiorly from the hairline in adolescence, inferiorly to the chin and mandible base, and on either side to the auricle [1]. The face has a significant impact on the psychological well being of the individual. Facial skin differs markedly from the skin of the other regions of the body. It makes the facial dermatoses stand apart, both in the clinical presentation and a therapeutic approach. Some common facial dermatoses are inflammatory, infective dermatoses, photo-dermatoses, pigmentary dermatoses, and degenerative dermatoses. Pigmentary skin disorders can either be hypomelanotic, hypermelanotic or a pattern of mixed hypo- and hyper melanosis. Hyperpigmentary disorders may be classified as: Melasma, Erythema dyschromicum umperstans (EDP), Lichen planus pigmentosus (LPP), Riehl's melanosis (RM), Nevus of Ota, Ephelides, Lentiginos, Exogenous ochronosis, Maturational dyschromia, and Periorbital hyperpigmentation, also referred to as idiopathic cutaneous hyperchromia of the orbital region (ICHOR), periorbital melanosis,

dark circles or infraorbital pigmentation[2].

The most common hypo-pigmented disorders that involve the face are pityriasis alba, vitiligo, and post-inflammatory hypopigmentation (PIH).

The inflammatory facial dermatoses group includes acne vulgaris (AV), rosacea, perioral dermatitis, seborrheic dermatitis (SD), atopic dermatitis (AD), contact dermatitis, and cutaneous lupus erythematosus[3]. Infective facial dermatoses are commonly seen include tinea faciei, pityriasis Versicolor, herpes zoster, herpes simplex (labialis and mucocutaneous), warts, molluscum contagiosum (MC), Hansen's disease, Etc. Degenerative dermatoses include senile comedones, seborrheic keratosis (SK), dermatoses papulosanigra (DPNs). Photodermatoses include UV-induced tanning, Polymorphous light eruption, phytophotodermatitis & actinic cheilitis. Miscellaneous dermatoses include immunobullous disorders (Pemphigus Vulgaris, Pemphigus foliaceus and Bullous Pemphigoid). There have been no prior studies in the rural area served by this institution on various dermatoses affecting facial skin and their causes. The present study was conducted to document the clinical pattern and epidemiological determinants of facial dermatoses among female patients attending this centre.

Materials and methods

This was a cross-sectional study for 12 months from January 2019 to December 2019 in the Department of Dermatology, Venereology and

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leprosy of a rural tertiary care hospital, Great Eastern Medical School, Srikakulam, Andhra Pradesh. A total of 500 female patients with facial dermatoses were enrolled in the study with their informed consent. They were assessed by available demographic and etiological data, detailed history, and clinical examination. The findings were recorded in a pre-designed proforma. Investigations, including the skin scrapings for potassium hydroxide mount, woods lamp examination, skin biopsy, and relevant investigations, wherever required, were done. Females above the age of 10 years with facial dermatoses were included with due consent/ assent. Patients with drug reactions and sexually transmitted infections (STIs) were excluded.

Data entry and analysis:Data were entered in Microsoft Excel sheet and analyzed using the IBM SPSS 22.0 software. Continuous data are summarised as mean and standard deviation, and categorical data are presented as percentages.

Results

This study comprised 500 patients, 110 patients in the age group of 30-39 years, 50 patients in the age group of 50-59 years. The majority were in the 3rd (22%) and the least in fifth (10 %) decades of life. Patients with only one facial dermatosis were 321 (64.2%); 179(35.8%) patients had more than one dermatoses. Among the facial dermatoses, pigmentary dermatoses were highest 355 (71%), and least

was immunobullous dermatoses 5 (1%). Among the pigmentary, hyperpigmentary were more (n=328) than hypopigmentary dermatoses. In hypermelanotic dermatoses, melasma was the highest, seen in 112 (31.5%) patients. Of the 112 patients, majority had centrofacial melasma 68 (60.1%) followed by malar melasma 44(39.2%). Among the hypopigmentary facial dermatoses, Vitiligo was seen in 12 (3.3%) patients, followed by Pityriasis Alba in 6 (1.6%). Acne, seborrheic dermatitis and perioral dermatitis were grouped under facial dermatoses affecting sebaceous glands. Of the 134 patients with Acne, the majority n = 68 (50.74%) were grade 2 followed by n = 38 (28.3%) with grade 3 acne. Premenstrual flare was noted in 58.2% of the acne patients. Other aggravating factors for acne were stress (31.4%) and steroid application (22.3%). Among the 28 cases of infectious dermatoses, herpes labialis was highest, seen in 10 (35.7%). Among the 54 cases of inflammatory dermatoses, Seborrheic dermatitis was the highest, seen in 21 (38.8%). Cases of other (not elsewhere classified) facial dermatoses were 67, among whom seborrheic keratosis is seen in 25 (38.4%).

In the present study, with regards to occupation pattern, the majority were agricultural labourers, about 190(38%) and least manual labourers 56(11.2%).The various results have detailed in the following tables.

Table 1: Age distribution of patients

Age (years)	Number(500)	Percentage %
10-19	82	16.4
20-29	90	18
30-39	110	22
40-49	94	18.8
50-59	50	10
60 and above	74	15

Table 2: Occupational pattern

Occupation	No of cases	percentage
Agricultural laborers	190	38
House maker	154	30
Students	100	20
Manual laborers (other than agricultural laborers)	56	11.2

Table 3: spectrum of facial dermatoses among patients

Facial dermatoses	Number	percentage
Pigmentary dermatoses (n=355)		
Melasma	112	31.5
Dermatosis papulosanigra	101	28.4
Periocular pigmentation	41	11.5
PIH	38	10.7
Bindi dermatitis	14	3.9
Vitiligo	12	3.3
Freckles	8	2.2

Riehl's melanosis	6	1.6
Pityriasis alba	6	1.6
Phytophotodermatitis	5	1.4
Nevus of Ota	4	1.1
Lentigines	3	0.8
Pityriasis versicolor	3	0.8
Ashy dermatosis	2	0.5
Facial dermatoses n=149		
Acne	134	89.9
Rosacea	9	6.0
Perioral dermatitis	6	4.0
Infectious Dermatoses n=28		
Herpes labialis	10	35.7
Hansen's disease	6	21.4
Tineafaciei	5	17.8
Pityriasis Versicolor	3	10.7
Molluscum Contagiosum	2	7.1
Herpes simplex	2	7.1
Eczemas n=54		
Seb. Dermatitis	21	38.8
Bindi Dermatitis	14	25.9
Chelitis	8	14.8
Pityriasis alba	6	11.1
Phytophotodermatitis	5	9.2
Immunobullous Disorders n=5		
Bullous Pemphigoid	3	60
Pemphigus Vulgaris	2	40
Others n=67		
Seborrheic Keratoses	25	37.3
Senile comed ones	20	29.8
Acrochordons	13	19.4
DLE	7	10.4
Compound nevus	2	2.9

Table 4: Pigmentary Dermatoses

Disorder	Number n=355	Percentage
Melasma	112	31.5
Dermatosis papulosa nigra	101	28.4
Peri-ocular pigmentation	41	11.5
Post-inflammatory hyperpigmentation	38	10.7
Bindi dermatitis	14	3.9
Vitiligo	12	3.3
Freckles	8	2.2
Riehl's melanosis	6	1.6
Pityriasis alba	6	1.6
Phytophotodermatitis	5	1.4
Nevus of Ota	4	1.1
Lentigines	3	0.8
Pityriasis versicolor	3	0.8
Ashy dermatosis	2	0.5

Table 5: Hypopigmentary and Depigmentary Dermatoses

Condition	Hypopigmented	Depigmented
Vitiligo	-	12
Pityriasis alba	6	-
Bindi dermatitis	6	-
Pityriasis versicolor	3	-

Table 6 :Associated Factors For Melasma

Associated factor	Number (n=112)	Percentage
Sunlight	96	85.71
Drug history	53	47.32
cosmetics	46	41.07
pregnancy	24	21.4

Table 7: Frequency Of Acne, Rosacea And Perioral Dermatitis

Facial dermatoses	Number (n=149)	Percentage
Acne	134	89.9
Rosacea	9	6.0
Perioral dermatitis	6	4.0

Table 8: Grades of acne

Grades of acne (IAA)	Number (n=134)	Percentage
Grade 1	22	16.4
Grade 2	68	50.74
Grade 3	38	28.3
Grade 4	6	4.47

Table 9: Infectious Dermatoses Based On Aetiology

Facial dermatoses	Number (n=28)	Percentage
Herpes labialis	10	35.7
Hansen's disease	6	21.4
Tinea faciei	5	17.8
Pityriasis Versicolor	3	10.7
Molluscum Contagiosum	2	7.1
Herpes zoster	2	7.1

Table 10: Spectrum of Eczematous Dermatoses

Facial dermatoses	Number(n=54)	Percentage
Seb.Dermatitis	21	38.8
Bindi Dermatitis	14	25.9
Chelitis	8	14.8
Pityriasis alba	6	11.1
Phytophotodermatitis	5	9.2

Table 11: Spectrum of other Facial Dermatoses

Facial dermatoses	Number (n=67)	Percentage
Seborrheic Keratoses	25	37.3
Senile comedones	20	29.8
Acrochordons	13	19.4
Discoid lupus Erythematosus	7	10.4
Compound nevus	2	2.9

Discussion

Facial skin disorders can cause a heavy emotional and psychological impact on patients, especially among the young, due to increased beauty consciousness, which may be far worse than the physical impact and further aggravate their anxiety. Therefore, facial dermatoses have become a common problem among patients consulting dermatologists. Most of these disease entities have well defined clinical characteristics and can be diagnosed easily by a detailed history and clinical examination with aids like Wood's lamp and dermoscopy. As a child, especially a female child, enters pubarche, she starts noticing changes in her body and becomes more conscious of her appearance. The study included all female patients over the age of ten years, taking this into account. Out of 500 patients

enrolled in this study, 110 patients were in the age group of 30 - 39 years, 94 patients in the age group of 40 -49, and 90 patients in 20 - 29. (Table – 1). One facial dermatosis was present among all the patients in 321(64.2%) and more than one facial dermatosis in 179(35.8%). Several facial dermatoses in this study were related to occupation and lifestyle, with the patients giving a history of photo-aggravation, stress, and cosmetics use. Agricultural workers formed a major group with 196 (38%) out of 500, indicating sunlight as an aggravating factor in facial dermatoses. It was followed by housewives - 154 (30%).

Category-wise distribution of facial skin disorders:

Pigmentary Disorders: Of the 500 patients, 355 patients had pigmentary disorders. The majority of them, 56.6 % (201), were between 30 - 39 years. UV radiation and cosmetics were found to be the common precipitating factors in our study. Among the pigmentary disorders, melasma was the most common, followed by DPNs, Periocular pigmentation and post-inflammatory hyperpigmentation. The findings of this study were similar to the study conducted by Kavva M, Nataraj HV[6] on facial hyper melanosis in which the majority of patients were in age groups of 31-40 years (41%). UV radiation is a common precipitating factor with Melasma being the most common pigmentary disorder. Hassan I, Aleem S, Bhat YJ, Anwar P et al[7] found the maximum number of patients with facial pigmentary disorders between 21-40 years (56.73%). Melasma was the most common pigmentary disorder. Melasma was seen in 112 patients, with a centrofacial pattern in 68(60.1%) and a 44(39.2%) malar pattern. 80 (71.4%) of these patients are agricultural labourers

with a definite history of exacerbation of pigmentation following prolonged sun exposure. Yalamanchili R, Shastry V[10] reported similar findings, with agricultural laborers accounting for 46.4% of the total. The finding was attributed to high sun exposure, one of the major etiological factors of melasma. Ana Carolina Handel, In their review article, Luciane Donida Bartoli Miot[8] emphasized sun exposure, pregnancy, and drugs to be known triggering factors for melasma. Out of 112 patients, the most important aggravating factor was found to be the sunlight in 96 patients (85.71%), followed by topical unknown drug history in 53 patients (47.32%), Cosmetics in 46 (41.07%). Among 112 patients, 24 patients (21.4%) developed melasma during pregnancy. Various studies such as Hassan I, Aleem S, Bhat YJ, Anwar P et al[7], S Kumar, Mahajan B B, Kamra N[9], Tamega Ade A, Miot LD, Bonfiatti C [12] and Yalamanchili R, Shastry V [12] reported similar findings of the present study.

Table 12: Aggravating factors for melasma in various studies

Aggravating factor	Present study (n=112)	Hassan I (n= 71)	Tamega Ade (n= 302)	Achar A (n= 250)	S Kumar (n=200)	Yalamanchali (n=140)
Sunlight	85.71%	65.75%	27.2%	55.12%	48.84%	44%
Drug history	47.32%	61.64	-	-	45.35%	-
Cosmetics	41.07%		-	23.39%	54.07%	-
Pregnancy	21.4%	16%	36.4%	22.4%	36.4%	-

The most common pattern of melasma was centrofacial type in 68 (60.1%) patients, followed by malar type in 44 (39.2%) patients. Similar figures have been reported by S Kumar, Mahajan B B, Kamra N (2014)[9] and Achar A, Rathi SK (2011), [12] Goh CL, Dlova CN (1999)[13] and Hassan I, Aleem S, Bhat YJ, Anwar P et al. (2015)[7] and Yalamanchili R, Shastry V (2015)[10] reported malar melasma as the most common type followed by centrofacial melasma.

Table 13: Different pattern of Melasma in various studies

Types of melasma	Present study (n=112)	Achar A (n= 250)	Goh CL (n= 205)	S Kumar (n=200)	Hassan I (n= 71)	Yalamanchli R (n= 140)
Centrofacial	60.1%	54.44%	11%	76.74%	46.57%	32%
Malar	39.2 %	43.26%	89%	23.26	50.68%	68%

101 patients had **Dermatosis Papulosa Nigra (DPN)**; most of them gave positive family history, and the majority 82 were middle-aged women between 45 to 65 years. The lesions initially appeared on the face and spread to the other parts. Niang SO, Kane A et al[15] made a similar observation with familial predisposition seen in 93.3% of patients examined. In this study, out of 101 patients with DPNs, 20 patients had Diabetes mellitus

Periorbital pigmentation was seen in 41 patients (11.5%). Most patients, 23 (56.09%), were in 20 - 40 years. Kavva M, Nataraj HV[6] Majority of these patients (60.9%) were housewives with altered sleep pattern (70%) and stress (67%). Hassan I, Aleem S, Bhat YJ, Anwar P et al.[7] reported inadequate sleep as a contributing factor in 71.4% of their study sample. Sheth PB, Shah HA, Dave JN[5] reported stresses as a factor for Periorbital hyper melanosis in 71% of homemakers.

In this study, 38 patients had post-inflammatory hyperpigmentation, of whom 28 patients had a history of PIH secondary to acne and irritant contact dermatitis, which is similar to the studies by Hassan I, Aleem S, Bhat YJ, Anwar P et al.[7] and Sarkar[4]

Freckles were seen in 8 (2.2%) patients, of whom 3 were students and 5 agricultural laborers, probably due to increased sun exposure and lack of adequate sun protection.

Riehl's melanosis was found in 6 (1.6%) patients, and all the patients had a history of cosmetics application, fairness creams, steroid creams and unknown topical medication, which is similar to the study conducted by kavva M, Nataraj HV[6]

Nevus of Ota was found in 3 patients. All patients had unilateral involvement with onset at birth. Bilateral involvement is rare. Two patients have both dermal and ocular involvement; this is similar to the study conducted by Sekar S et al[14]

Among the 27 hypopigmented facial dermatoses, Vitiligo was found in 12 patients and P. Alba in 6 patients.

Among 201 patients of facial hypomelanosis, Hassan I, Aleem S, Bhat YJ, Anwar P et al[7] noted P. alba, vitiligo in 19 each and post-inflammatory hypopigmentation in 8. Soni B, Raghavendra KR et al[18] in a study of hypopigmented and depigmented facial lesions found P. alba in 27.33%, P. Versicolor in 21%, vitiligo in 19.33% and post-inflammatory hypopigmentation in 14% of a total of 300 patients aged 0-19 years. In both the studies, P. alba was the most common hypomelanotic facial disorder, followed by Vitiligo. P. alba primarily affects paediatric age groups. The relatively low figure for P. alba in this study may be due to the inclusion of all age groups above 10.

Vitiligo of progressive type was found in 12 (3.3%) patients in the 10-20 years of age group. It is similar to a study by Shah H, Mehta A, Astik B[16], wherein 32.82% of 365 patients were in the second decade of life.

P. alba was found in 6 (1.6%) patients, all of them below the age of 15 years with a history of atopy. Vinod S, Singh G et al[17] noted atopy in 37 (17%) among a study population ranging from 8 months to 32 years.

Other pigmentary facial melanosis in this study were **freckles** in 8 and **ashy dermatoses** in 2 patients.

Acne, Rosacea And Perioral Dermatitis:

Among 500 patients, **acne** was found in 134 (26.8%), rosacea in 9 (1.8%) and perioral dermatitis in 6 (1.2%). The majority of acne patients, 75%, were in the 10- 30 years age group. This is comparable to figures by Burton JL, Cunliffe WJ[45] et al., who in their review reported the peak age of acne as between 14 to 17 years in females.

Of the 134 acne patients, 110 were in the reproductive age group (attained menarche; not reached menopause). Premenstrual flare was observed in 78 (70%) patients. The pilosebaceous duct becomes narrower between 15 to 20 days of the menstrual cycle, and the ensuing blockage leads to premenstrual acne. This figure compares with Adityan B, Thappa DM[20], 57.7% of 308; Stoll S, Shalita AR et al[21] 44% of 400; and Lauren Geller, Jamie Rosen,²² 56% of 105 patients respectively. Aggravation of acne due to topical steroid application is found in 30 (22.3%) of the 134 cases, whereas Swathi G Mamatha, S Kusagur noted 12% of the cases out of 50 students [23]. The percentage is slightly higher in our study because of ignorance. Self-medication and peer advice also seem to be frequent practice attempted before visiting a dermatologist. Aggravation of acne due to stress was observed in 42 (31.4%), most of whom were students 48% and housewives 34.2%. It is similar to the observations by Green and Sinclair[24] based on a written questionnaire survey among 215 medical students of Queensland Medical University, Australia, where 67% of students believed that stress played a role in acne exacerbation. Khunger N, Kumar C[19] reported stress as an aggravating factor in 52% out of 280 patients. In a study conducted by Swathi G[23] et al. out of 50 students, stress was reported in 20% of the patients. In the present study, hirsutism was observed in 7 (5.22%) of the cases, which was similar to the study conducted by Adityan B, Thappa DM[20] who reported a 9.48% incidence hirsutism in acne patients. Out of 134 patients with acne, grade II acne was the most prevalent type seen in 68 patients (50.74%), followed by grade III in 38 (28.3%), grade I in 22 (16.4%) and grade 4 in 6 (4.47%). These findings were similar to those by Swathi G Mamatha, S Kusagur [23] and Addor FAS, Schalka S[25].

Swathi G Mamatha, S Kusagur reported grade II (85%) as the most prevalent type out of 50 students. Addor FAS, Schalka S reported grade II (81%) as the most common type in a survey of 226 medical records[25]. Adityan B, Thappa DM[20] noted grade I acne as the most prevalent in 60.2% of 308 patients.

Seborrheic dermatitis was the most common dermatoses found in association with acne. It was found in 13(9.7%) patients. Swathi G Mamatha, S Kusagur reported out of 50 students, seborrheic dermatitis was found in 34% of acne patients[23].

Rosacea was found in 9 patients. All of them were above 30 years. All the 9 patients have sunlight, emotions and spicy foods as triggering factors; this is similar to the review article by Ravi Chandra Vemuri, Rohit Gundamaraju et al[27].

Lazaridou E, Apalla Z(2010), in his study, found 73% out of 100 patients complained of worsening of conditions after sun exposure[26]. Perioral dermatosis was seen in 4% of patients out of 149.

Infectious dermatoses: Among 28 patients with infectious dermatoses, herpes labialis was found in 10 (35.7%), Hansen's disease in 6 (21.4%), Tinea faciei in 5 (17.8%), Pityriasis Versicolor in 3 (10.7%), herpes zoster and MC in 2 (7.1%) patients each.

Herpes labialis was found in 10 (35.7%) patients. The most common site was lips in all cases. E.O Ghaemi, A. Moradi et al[30] also noted Lips as the most common site in 87.6% of 310 patients.

Tinea Faciei was found in 5 (17.8%). Syed Yousuf Ali, Sukumar Gajjala et al. (2016)[33] reported Tinea Faciei in 4 (2%) out of 200 patients. Thus, Tinea Faciei was relatively uncommon in their series.

Pityriasis Versicolor was found in 3 (10.7%) of patients, all aged between 20 - 29 years. One of them had a positive family history. Rao GS, Kuruvilla M, studied 120 patients with P. Versicolor and reported 21-30 as the age group with maximum cases. Positive family history was noted in 46 (38.30%) patients.

Molluscum Contagiosum was found in 2 (7.1%); both had other affected family members. According to Hiba H. Maqdas, Mohammad Y. Abbas et al[31] 53.3% of 416 patients reported with positive family history. Two (7.1%) patients, both above 40 years, had a **Herpes zoster**. The pain was the chief complaint. Puri LR, Shrestha GB et al.[45](2011) also found 64.7 % above the age of 40 years. Pain (77.9 %) was the main complaint. Ghaznawi N, Virdi A et al. (2011) reported [28] a majority of 112 patients of herpes zoster to be in the age group of 50-59 years. Edell AR, Cohen EJ also found a majority of 11 of 40 HZO patients were between 50 -59 years[29]

Ecematous dermatoses- Out of 54 patients S. Dermatitis was found in 21(38.8%), Bindi dermatitis in 14(25.9%), cheilitis in 8(14.8%), P. alba in 6(11.1%) patients and Phytphotodermitis in 5(9.2%).

Seborrheic Dermatitis was found in 21(38.8%) of the population, and 13 of them are associated with acne vulgaris.

Swathi G, Mamatha S Kusagur reported that out of 50 patients with acne vulgaris, Seborrheic dermatitis (34%) was the most common association.

Bindi dermatitis was found in 14(25.9%), and glabella was the most common site. In a study conducted by Nath AK, Thappa DM[35], out of 46 patients with kumkum-induced dermatitis, the forehead was the most commonly involved site (31/46), followed by the glabellar area (16/46).

Actinic cheilitis was found in 8 (7.9%), and all of them presented with pain and burning sensation on exposure to sunlight. The common site involved was the lower lip.

This is similar to the study conducted by Ana Maria de Oliveira Miranda[36]. Out of 75 patients, 42 patients (56%) were females, nineteen (25.3%) patients reported at least one symptom, including pain, burning and itching. Sixty-five (86.7%) patients presented actinic cheilitis only in the lower lip. All of the patients reported sun exposure. In this study, all of them were agricultural laborers, indicating occupation plays an important role in developing actinic cheilitis. This is similar to the study conducted by A Markopoulos, Albanidou-Farmaki et al[37]. Out of 65 patients, an outdoor occupation was indicated for 43 (66.2%) patients.

Bullous dermatoses: 5 patients in this study had facial lesions due to bullous dermatoses. 3 were **Bullous pemphigoid**; 2 were **Pemphigus vulgaris**. All were above 60 years old.

S M Langan, L Smeeth did a retrospective National Health Scheme (NHS) of the United Kingdom health database study on the incidence of Bullous pemphigoid and pemphigus vulgaris from 1996-2006. They found the median age for Bullous pemphigoid as 80 years and pemphigus vulgaris as 70 years[38].

Other dermatoses- Among 67 patients grouped as other dermatoses, seborrheic keratosis was found in 25 (37.3%), senile comedones in 20 (29.8%), Acrochordons in 13 (19.4%) patients, DLE in 7 (10.4%) and compound nevus in 2 (2.9%) patients.

Seborrheic keratosis (SK) was seen in 25 patients (37.3%); most were above 60. This is similar to the study of the spectrum of Seborrheic keratosis by Rajesh G, Thappa DM et al[39] who noted 40% of 250 SK patients to be above 60 years.

Periorbital seborrheic keratosis was the most common presentation in this study. DPNs were associated findings in 15 patients. In a study by Besra L, Jaisankar TJ et al[40] out of 20 patients of SK, 8 patients had DPNs, and the most common site for SK is the Periorbital region which is found in 10 patients.

Senile comedones were found in 20(29.8%) patients; the most common age group affected is above the age of 60 years.

Durai PC, Thappa DM (2012)[41] et al. found senile comedones in 23 (4.6%) of 500 elderly patients. Grover S, Narasimhalu C (2009) reported Senile comedones in 13(6.5%) patients out of 200 patients[42] The occurrence of senile comedones in this study is relatively higher than other studies and may be due to the large proportion of rural clientele with agricultural labor as the main occupation and consequent excess solar exposure. In the three studies, senile comedones were more frequent in patients above the age of 60 years, consistent with chronological aging of the skin.

Acrochordons were found in 13(19.4%) patients majority being in the 4th and 5th decade. A large number of patients with acrochordons were obese and/ or diabetic. This compares favourably with a study by Omar Soliman El Safoury and Magdy Ibrahim,[43] where 154 of 276 female patients with acrochordons were diabetic.

Seven (10.4%) were found to have Discoid Lupus Erythematosus and had photo aggravation.

Fahad M. Al-Saif, Amal O. Al-Balbeesi et al[44] studied 56 DLE patients, of whom 33 (58.9%) were females. Scalp and face were involved in 42.9%, and 18 (32.1%) reported exacerbation of the lesions by sunlight.

Conclusion

Previous studies have focused on specific facial dermatoses like melasma, acne, facial melanosis, vitiligo and pityriasis versicolor, etc. However, there is a paucity of comprehensive studies of facial skin disorders as a group. Hence this study was taken up to determine epidemiological and clinical aspects of the skin disorders predominantly affecting the face. The subject is complex, as facial skin disorder includes a large heterogeneous group of disorders, but no precise classification exists. Opinions vary regarding the conditions to be included under facial dermatoses. This study is an effort to fill this gap in understanding facial dermatoses, which have a significant bearing on physical and mental wellbeing and the Dermatological Quality of life (DLQI) among the female clientele of this institution.

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