

A Clinico-Epidemiological Study of Dermatoses Affecting Nose in Patients Attending Skin OPD of A Tertiary Care Hospital

Ishita Patra¹, Jolly Seth², Kaushik Shome³, Krishnendu Sarkar⁴

¹ (Specialist Medical Officer, Department of Dermatology, Venereology and Leprosy, Saltlake SDH, Kolkata, West Bengal, India)

² (Professor, Department of Dermatology, Venereology and Leprosy, Burdwan Medical College, Burdwan, West Bengal, India)

³ (Professor, Department of Dermatology, Venereology and Leprosy, Burdwan Medical College, Burdwan, West Bengal, India)

⁴ (Correspondence: Dr. Krishnendu Sarkar, (Assistant Professor, Department of Radiodiagnosis, Medical College, Kolkata, West Bengal, India) E-mail: krishnendu330@gmail.com)

Abstract:

Purpose: The aim of this study was to highlight various dermatoses affecting nose, classify based on etiology, analyze the demographic profile of study population and to establish histopathological correlation in selected cases.

Methods and material: Ours was a cross sectional study for a period of 12 months and the patients with skin lesions involving nose were included and demographic data, presentation of nasal lesions were noted in a pre-set proforma. In doubtful cases, biopsies were done, and lesions were grouped based on the etiology, age, sex. At the end of the study the data were compiled, tabulated and analyzed by using Statistical techniques such as Mean, Median, Mode & Standard deviation & other relevant calculations.

Result: 146228 patients attended the outdoor and 89 patients had nasal lesions (incidence of 0.61% per 1000) with male to female ratio of 1.61:1. Among different types of nasal dermatoses, Infectious conditions were most common etiological type (17/89, 19%), followed by Inflammatory condition (14/89, 15.7%) & pigmentary condition (14/89, 15.7%). Autoimmune diseases & tumor cysts were found in 12 (13.4%) patients each followed by cutaneous malignancy (7.8%) & 5.61% cases were of nevoid origin. Other miscellaneous conditions comprised 7.8% of total cases. In our study Infections, autoimmune disorders, inflammatory disorders & malignancies were comparatively more common in male while tumor, cysts, nevoid conditions were in female.

Conclusion: We undertook this study to throw light on various cosmetic problems in adults because of involvement of nose causing a great psychological impact. Early diagnosis of nasal lesions is essential for therapeutic purpose as well as improving the patients' social and aesthetic wellbeing.

Key Word: Nasal dermatoses, Lupus pernio, inflammatory lesions.

Date of Submission: 26-06-2024

Date of Acceptance: 04-07-2024

I. Introduction

Nose has a unique significance in understanding the dermatoses involving the face and also is of utmost importance in cosmetic procedures. The skin in the areas of the dorsum, columella, and sidewalls is thin, loose, compliant, and relatively less sebaceous, while the skin in the areas of the nasal tip and alae is thicker, more sebaceous, more adherent, and less flexible [1-2]. The nose with its rich pilosebaceous skin at the nasal tip and alae can frequently exhibit comedones, sebaceous hyperplasia, rosacea, trichoepithelioma, trichostasis spinulosa, and trichofolliculoma [3]. The nose is in the central part of the mid-face and has an important functional, aesthetic and psychological role. It is the most exposed part of the face, so there is increased exposure to ultraviolet (UV) light, this accounts for the high incidence of cancerous involvement of the skin of the nose.

Because of the exposed, highly visible localization, lesions on the skin of the nose are often noticed by patients themselves, typically very early in the course of the disease. The exposed localization on the face is also cause for increased exposure to ultraviolet (UV) light, which represents one of the most dangerous strains for the skin in this particular location because it is a proven carcinogen. This accounts for the high incidence of cancerous involvement of the skin of the nose, which has proven to be the most common site for skin cancer on

the human body. Recognition and characterization of individual nasal skin disorder has been sluggish as compared to much other skin disorder.

Previous studies have focused on the specific diseases of facial dermatoses; however, there is lack of comprehensive study of nasal skin disorder. Hence this study has been taken up to determine epidemiological and clinical aspects of the skin disorders predominantly affecting nose.

II. Material and Methods

The study was conducted between April 2019 to March 2020 after the research proposal was submitted before Institutional ethics committee for ethical clearance and the same obtained. **Ethics Approval Number: BMC (Dated:**

All new adult patients with skin lesion involving nose attending the Dermatology OPD fulfilling the inclusion and exclusion criteria were thoroughly examined. The study was the institution based cross sectional study. For each case, we filled the proforma which includes name, age, sex, other demographic parameters, detailed history, general survey, detailed general and dermatological examinations and provisional diagnosis. Photograph of lesions were taken in all cases. Biopsy was performed in doubtful cases. Then the individual lesions were grouped based on aetiology as:

1. Inflammatory conditions
2. Infection and Infestations
3. Autoimmune diseases
4. Pigmentary disorders
5. Immunobullous disorders
6. Nevoid conditions & Genodermatoses
7. Malignant tumours of the nose
8. Tumors and cysts
9. Miscellaneous

This prospective comparative study was carried out on patients of Department of Dermatology at Burdwan Medical College and Hospital, Burdwan, West Bengal from April 2019 to March 2020. A total 89 adult subjects (both male and females) of aged ≥ 18 , years were for in this study.

Study Design: The study was institution based cross sectional study.

Study Location: Department of Dermatology and Pathology of Burdwan Medical College and hospital, Burdwan. The Institution serves as only tertiary care teaching hospital encompassing the whole Burdwan district and surrounding region.

Study Duration: April 2019- March 2020.

Sample size: 89 patients.

Sample size calculation: Sample was designed according to convenient sample.

Subjects & selection method: All adult Patients attending skin OPD of Burdwan Medical College & Hospital with cutaneous diseases of nose during the aforesaid study period.

Inclusion criteria:

1. All adult patients (more than 18 years) selected are those attending the department primarily with complaints pertaining to the conditions solely affecting the nose.
2. Both sex included

Exclusion criteria:

1. Patients who have already been diagnosed and receiving treatment for facial skin disorder
2. Terminally ill patients

Procedure methodology

- The study was the institution based cross sectional study. All the newly registered adult patients (more than 18 years) satisfying the inclusion and exclusion criteria within the previously mentioned time period were taken for study. First of all we took valid consent from patient after discussing about the study, procedures and motivated the patient to come for review in subsequent visits, where necessary. For each case, we filled the proforma

which includes name, age, sex, other demographic parameters, detailed history, general survey, detailed general and dermatological examinations and provisional diagnosis. Photograph of lesions were taken in all cases. For any difficulty I would consult my Guide and other teachers of the department for that study. After collection of all data, we did analysis of data by different statistical method and the result was presented by different chart and diagrams.

Statistical analysis

At the end of the study the data were compiled, tabulated and analyzed by using Statistical techniques such as Mean, Median, Mode & Standard deviation & other relevant calculations. The analyzed data were presented in the form of figures, diagrams, tables etc.

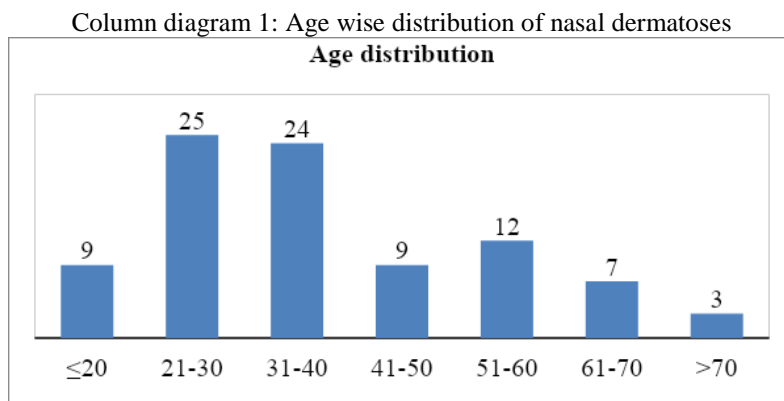
III. Result

Out of total 146228 patients attending skin outpatient department during the study period, patients with nasal dermatoses were 89 (incidence of 0.61% per 1000). In the current study male outnumbered female with a sex ratio of 1.61:1 (55/34). In our study Infections, autoimmune disorders, inflammatory disorders & malignancies were comparatively more common in male while tumor, cysts, nevoid conditions were in female. Pigmentary disorders were equally distributed among male & female.

Table1. Showing sex distribution of cases

| MALE | FEMALE |
|----------|---------|
| 55 (62%) | 34(38%) |

Out of 89 cases, most of the patients were in the age group of 21-30 years. Least common age group of presentation was more than 70 years. Mean age of presentation was 38.09 years. Most of the male cases were in the age group of 31-40, whereas, female cases were in the age group of 21-30.

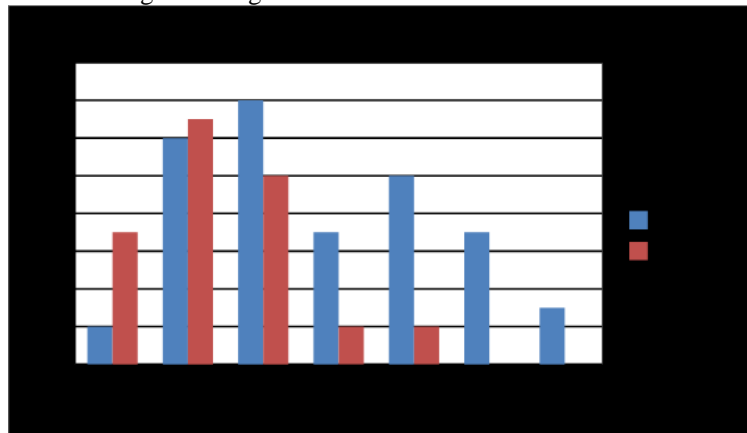


AGE & SEX WISE DISTRIBUTION OF NASAL DERMATOSES-Most of the male cases were in the age group of 31-40, whereas, female cases were in the age group of 21-30. Male and female were almost equally distributed in the age group of 21-30. In female, around 94% (32/34) cases were within 50 years of age.

Table2. Age & Sex wise distribution of nasal dermatoses

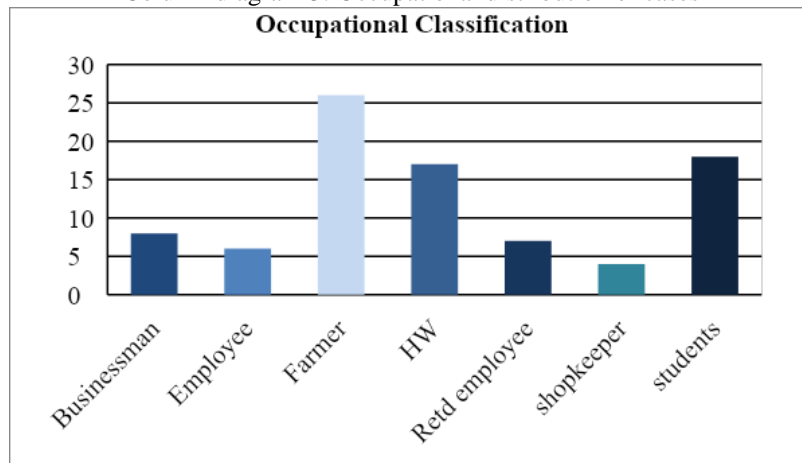
| Age | ≤20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | >70 |
|--------|-----|-------|-------|-------|-------|-------|-----|
| Male | 2 | 12 | 14 | 7 | 10 | 7 | 3 |
| Female | 7 | 13 | 10 | 2 | 2 | 0 | 0 |

Column diagram 2: Age & Sex wise distribution of nasal dermatoses



CASE DISTRIBUTION ACCORDING TO OCCUPATION-Out of 89 cases, 26 were farmers, 18 were students. Females were mostly home makers (26/33). Other occupations in descending order were businessman, retired employee and employee and shopkeeper.

Column diagram 3: Occupational distribution of cases



Dermatoses affected different anatomical parts of nose. Most commonly involved site in the present study was midnose (35/89, 39%) followed by tip of nose (29/89,33%) , followed by in descending orders were alar crease (7/89), left side (6/89), whole nose and right side 4in each, root of nose (2/89) and tip and mid nose, columella and tip 1 in each.

Table3. Showing anatomical distribution of nasal dermatoses

| Anatomical Distribution | No of cases |
|-------------------------|-------------|
| Midnose | 35 |
| Tip of nose | 29 |
| Columella & tip of nose | 1 |
| Tip & midnose | 1 |
| Root of nose | 2 |
| Right side of nose | 4 |
| Whole nose | 4 |
| Left side of nose | 6 |
| Alar crease | 7 |

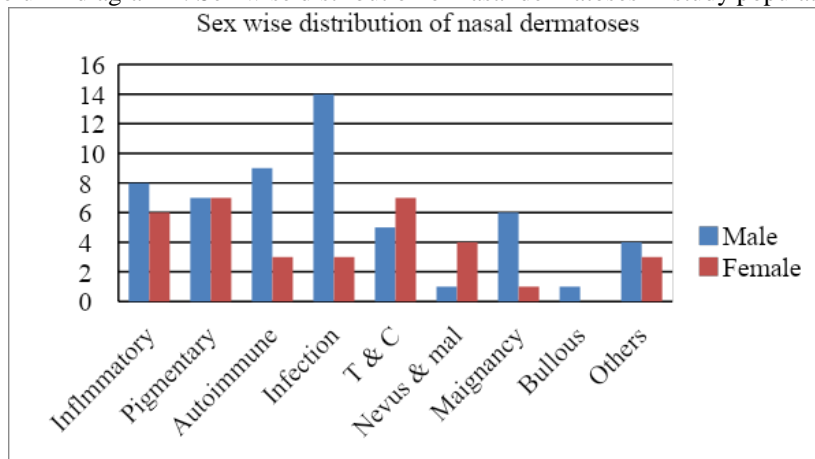
In our study Infections, autoimmune disorders, inflammatory disorders & malignancies were comparatively more common in male while tumor, cysts, nevoid conditions were in female. Pigmentary disorders were equally distributed among male & female.

Among different types of nasal dermatoses, Infectious conditions were most common (17/89, 19%) finding in our study and most common infections was tinea faciei (4/17).

Table4. Showing Etiological classification of nasal dermatoses in study population (n=89)

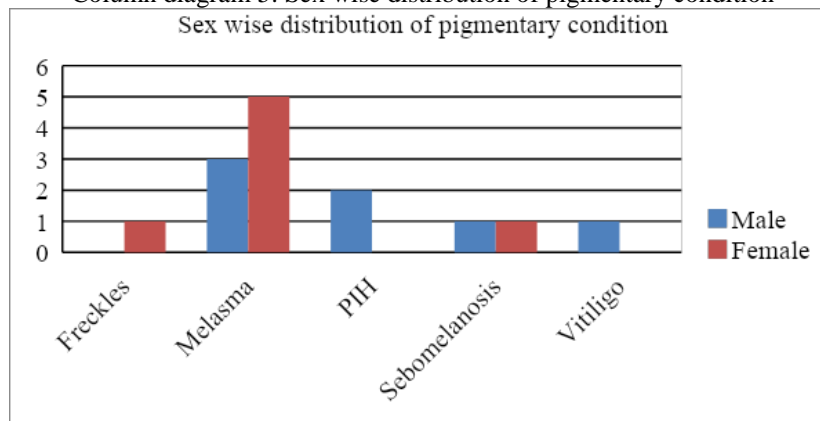
| Etiology | No |
|-------------------------|----|
| Inflammatory conditions | 14 |
| Pigmentary conditions | 14 |
| Autoimmune conditions | 12 |
| Infections | 17 |
| Tumor & Cysts | 12 |
| Nevus & Genodermatoses | 5 |
| Malignancy | 7 |
| Bullous disorder | 1 |
| Others | 7 |

Column diagram 4: Sex wise distribution of nasal dermatoses in study population

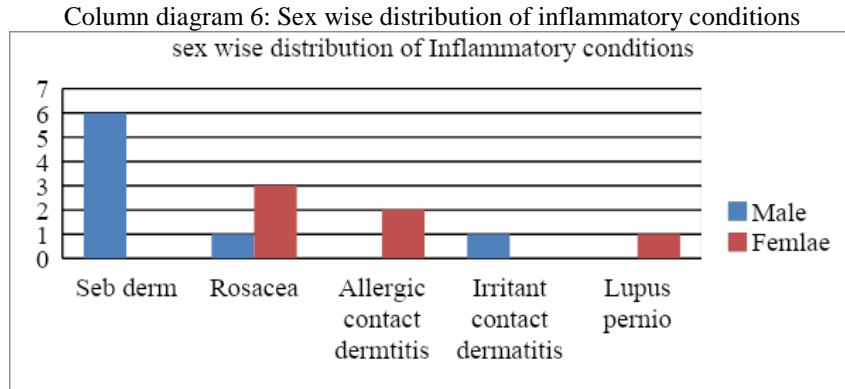


Out of 89 cases, 14 had pigmentary disorders among which Melasma was most common (8/14,57%) followed by post inflammatory hyperpigmentation and sebomelanosis (2in each, 15%), and one case of vitiligo and freckles. Though pigmentary disorders were equally distributed in male and female, melasma was more common in female while PIH was exclusive in male.

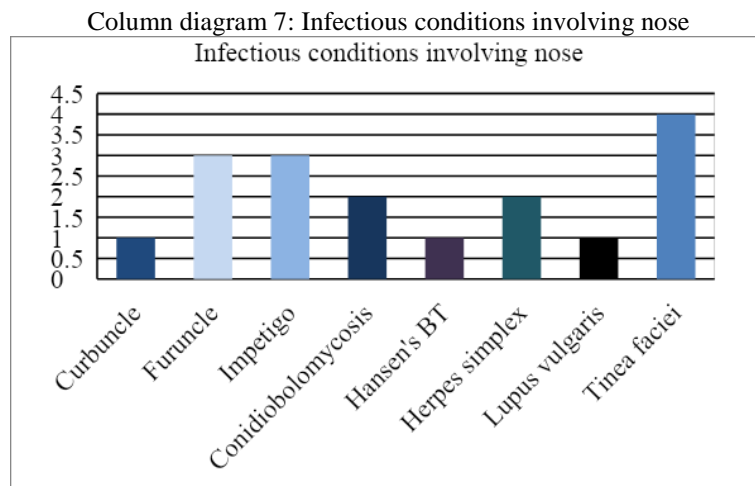
Column diagram 5: Sex wise distribution of pigmentary condition



Out of 14 (14/89) inflammatory disorders most common was seborrheic dermatitis (6/14, 43%) which was exclusively found in male with no definite occupation association. Mean age of presentation was 47.3 year. Rosacea was predominant in female (3 vs 1). Out of three females 2 were housemakers. Mean age here was 44.25 year, allergic contact dermatitis and lupus pernio were solely found in female; whereas, irritant contact dermatitis affected male only.



Out of 89 cases 12 patients had autoimmune disorder involving nose. Discoid lupus erythematosus was the most common form of autoimmune disorder in the current study (10/12, 83.3%). Others were acute lupus erythemaatosus and morphoea with one case in each. DLE was predominantly found in male (M: F= 4:1). DLE was most prevalent in male (8/10) with a mean age of 41.9 year. Most patients were farmer by occupation. Infections were most common form of nasal dermatoses affecting 17 cases. Types of infections found in the study were tinea faciei (4/17), furuncle and impetigo (3 in each), herpes simplex and Conidiobolomycosis (2 in each), carbuncle, Hansen’s BT, and lupus vulgaris (1 in each). Out of these 17 patients 14 were male and rest 3 females who had tinea infection



Comedones most commonly affected female students (3/4). Mean age of presentation was 22.5 years. Rhinophyma mostly seen in males (2), Sebaceous hyperplasia mostly in female (2). Most of the nevoid conditions and genodermatoses were found in female (4/5) whereas malignancies were more common in male (6/7). Only one case of bullous disorder was found which was diagnosed as Pemphigus vulgaris involving nose and the case was male. In this study we found that several other conditions can also involve nose like 3 cases of keloid and one case each of Acanthosis nigricans, steroid atrophy, calcinosis cutis and hypertrophic scar.

IV. Discussion

As we mentioned our study is unique of its own kind, we are unable to compare every findings of the study with that of others. After vigorous search in Cochrane database, we were unable to find similar studies. Here we are trying to compare some of the findings of our study with other related studies on facial dermatoses.

In our study total cases of nasal dermatoses were 89 (incidence of 0.61% per 1000), with a male to female ratio of 1.61:1.

The study conducted by Jain et al ⁽⁴⁾ (1.2:1), Bhgwat et al ⁽⁵⁾ (1.08:1) and Hemalingiah et al ⁽¹⁵⁾ on facial dermatoses showed similar male preponderance which is comparable with our study. A study done by Ravindranath et al ⁽⁸⁾ and by Radhamani et al ⁽⁹⁾ showed female preponderance which do not match with our findings.

Major group of disorder affecting females were pigmentary & tumor, cysts whereas male presented with infections more commonly. These findings are again consistent with the findings of the study conducted by Jain et al ⁽⁴⁾. These findings can be explained by the fact that because of occupational exposure, males are prone to

hot and humid environment. Melasma was more common in female which can be related to heat exposure during cooking and use of oral contraceptive pills in females.

Most of the patients in our study were seen in second to fourth decade of life. These findings are consistent with that of the study conducted by Jain et al ⁽⁴⁾.

Increased prevalence in these age groups can be due to increased exposure to infective agents, environmental and cosmetic insults and UV exposure in these ages.

Disease duration cannot be compared with previous related studies because we included a large spectrum of dermatoses whose duration varies widely.

In the present study most common group of disorder was infection (19%) which is consistent with a study of facial dermatoses by Bhagwat et al ⁽⁵⁾, though the relative prevalence was higher (37.5%).

But DLE was found to be the most common individual nasal dermatosis in our study accounting for 10 cases (11.2%) followed by melasma (8.9%). Gupta et al ⁽⁶⁾ conducted a study of facial dermatoses on male patients where the most common complaint was Melasma, found in 76.7% of the cases. This discrepancy can be explained by the fact that we took only nasal dermatoses and isolated nasal melasma is not a frequent finding. This explains relative lower incidence of melasma in our study. On the other hand, isolated nasal DLE is not uncommon.

Jain et al ⁽⁴⁾ found most common disorder involving face was pigmentary disorder (26.7%) which was the second most common group of disorders in our study (16%). The explanation of this variation has already been mentioned above. Similar findings were also observed by the studies conducted by Isidore et al ⁽⁷⁾ and Ravindranath et al ⁽⁸⁾. (10)

In our study inflammatory condition accounted for of 14% of nasal dermatoses & most common inflammatory condition was seborrheic dermatitis (43%), followed by Rosacea (29%), ACD (14%), ICD (7%), lupus pernio (7%). This is consistent with the observation of the study conducted by Ravindranath et al ⁽⁸⁾.

Radhamani et al ⁽⁹⁾ found contact dermatitis as the most common inflammatory condition in their study. We found ACD in 2 patients (2.24%) but in study on facial dermatoses done by Jain et al ⁽⁴⁾ six cases of ACD were found (5.45%).

In our study we found 4 cases of Rosacea which showed female predominance with mean age 44.25 year. A study done by Bhattarai S et al ⁽²⁰⁾ showed male preponderance which does not match with our study. They found mean age of patients was 46.67 year which is in pace with our study.

In our study pigmentary condition involve 16% of all nasal dermatoses & most common pigmentary condition involving nose was melasma (57%), followed by PIH (15%), sebomelanosis (14%), Vitiligo (7%), Freckles (7%).

In our study the mean age of presentation of melasma was 31.8 year. This finding is consistent with that of the study conducted by Achar et al ⁽¹⁰⁾ and Jain et al ⁽⁴⁾ where the average age of presentation of melasma was 33.45 year and 33.13 years.

Melasma is more common in women. We found about 63% female among total melasma cases. This finding is also consistent with the study conducted by Achar et al. ⁽¹⁰⁾

PIH found in our study was 15%. This is comparable with study done by Jain et al ⁽⁴⁾ as they found in 17.5% of cases.

Vitiligo is very common in face but only nasal involvement is very rare. We found only one case of vitiligo. But this is not comparable with study done by Jain et al ⁽⁴⁾ who found it in 17.5% cases as they included whole face.

Among the autoimmune conditions most common condition involving nose in our study is DLE (83%), followed by Acute LE (9%) & Morphea (8%).

A clinic-epidemiological study conducted by Gopalan G et al ⁽¹¹⁾ found that 29% of all DLE lesions involved nose whereas it was 76% in the study done by Sandipan et al.

Gopalan G et al ⁽¹¹⁾ found majority of patients had DLE in between 31-50 years which is matched with our study as we found 6 out of 10 DLE cases in between 31-50 years (mean age was 41.9year)

Mean age of onset was 36 in study conducted by Insawang et al ⁽¹³⁾ & 31.4 in study done by Bajaj et al ⁽¹⁴⁾ which are also comparable with our study.

Female to male ratio in our study was 1:4 showing male predominance; while in study done by Gopalan G et al ⁽¹¹⁾ found female to male ratio was 4.1:1 showing female predominance. This disparity in our study is again because of inclusion of isolated nasal cases.

In our study, out of 10 DLE most of patients were farmers thus showing a definite relationship with chronic UV exposure. This finding was consistent with study of Gopalan G et al ⁽¹¹⁾.

In this study most common infection involving nose was Tinea faciei (23%), followed by impetigo (18%), furuncle (17%), Conidiobolomycosis (12%), herpes (12%), lupus vulgaris, Hansen's disease & carbuncle.

Fungal infection (tinea faciei) was seen in 23% of patients in our study which is consistent with a study on facial dermatoses conducted by Jain et al ⁽⁴⁾ (26%) and Hemalingiah et al ⁽¹⁵⁾.

Most common tumor & cysts involving nose in our study was comedone (4), followed by sebaceous hyperplasia (3), rhinophyma (2), trichoepithelioma (1), milia (1), venous malformation (1).

Hemalingiah et al⁽²⁸⁾ found in a study on facial dermatoses in adolescent age group as most common dermatoses was Comedones which is very much similar with our study in this age group. We had found most cases of Comedones among students (19-22 years' age).

Nevoid condition involving only nose is a rare finding. In our study most common nevus was compound nevus (40%) followed by congenital melanocytic nevus (CMN), verrucous epidermal nevus. But these findings were not consistent with the observations of the study on facial dermatoses carried out by Ravindranath et al⁽⁸⁾ where they found CMN as most common nevus involving face among all nevoid conditions.

In our study we found that most common malignancy involving nose was BCC (43%) followed by Melanoma (29%), Keratoacanthoma (14%), Lethal midline granuloma (14%).

A study on BCC conducted by Kumar et al⁽¹⁶⁾ found that BCC is rare in young population. In our study most common age group presented with BCC in between 50-80yrs which is comparable with the study of Kumar et al⁽¹⁶⁾. They also showed that BCC more commonly occurs in persons who are chronically exposed to UV radiation. This finding is very much consistent with that of our study as we found BCC more commonly in farmers.

A study conducted by Zargar M et al⁽¹⁷⁾ found that 60.4% male & 39.6% female were having BCC respectively, which is almost similar to the findings of Lotfinejad et al⁽¹⁸⁾ (67.4% men and 32.6% women). But in our study BCC occurred in all male patients, though in this small sample size it is very much difficult to come to a conclusion.

The results reported by Hakimi N et al⁽¹⁹⁾ on more cases of BCC among residents of rural (60.78%) rather than urban region (39.13%) support our findings.

Only one case of bullous disorder (Pemphigus vulgaris) was found out of 89 cases.

Among the other dermatoses we found 3 cases of keloid, one case each of acanthosis nigricans, steroid atrophy, hypertrophic scar and calcinosis cutis. Keloid showed female preponderance which is consistent with the study conducted by Rabindranath et al⁽⁸⁾.

Ankad et al⁽²¹⁾ found a case where calcinosis cutis present over face was mimicking xanthoma but in our study we found both calcinosis cutis over nose and xanthoma over eyelid in a same patient.

Owczarek et al⁽²²⁾ reported a case of lupus vulgaris in a patient of pulmonary tuberculosis which is similar to our finding.

Venkatesan et al⁽²³⁾ found a case of carbuncle in a patient of uncontrolled diabetes which supports our findings.

This study provides an insight into various aspects of nasal dermatoses encountered in day to day practice.

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.

Main limitation was a limited study period of 1 year, resulting in less study population.

V. Conclusion

This study provides an insight into various aspects of nasal dermatoses encountered in day to day practice. We undertook this study to throw light on various cosmetic problems in adults because of involvement of nose causing a great psychological impact. This study was undertaken to assess the nature and extent of involvement of nose in various dermatoses at different age and sex. No previous studies exist which have studied nose involvement only.

References

- [1]. Heidari Z, Mahmoudzadeh-Sagheb H, Khammar T, Khammar M. Anthropometric measurements of the external nose in 18-25-year-old Sistani and Baluch aborigine women in the southeast of Iran. *Folia Morphol (Warsz)* 2009; 68:88-92.
- [2]. Fattahi TT. An overview of facial aesthetic units. *J Oral Maxillofac Surg.* 2003; 61:1207-1211. doi: 10.1016/S0278-2391(03)00684-0.
- [3]. Ayse Pelin Yigider, Fatma Tulin Kayhan, Ozgur Yigit, Ayse Kavak, Cemal Cingi, Skin diseases of the nose, *American journal of Rhinology & allergy*, volume: 30, issue: 3, page(s): e83-e9 May 1, 2016
- [4]. Jain M, Sing K, Kanodia S, Vishwender. Clinico-epidemiology of facial dermatoses. *Indian J Basic Applied Med Res*; March 2018: Vol.-7, Issue- 2, P. 154-158
- [5]. Bhagwat PV, Chhangte MZ, Kudligni C. A clinical study of facial dermatoses. *Int J Res Dermatol* 2019; 5:40-4
- [6]. Gupta A. Perioral dermatitis. In: Williams H, Bigby M, Diepgen T, Herxheimer A, Nadir L, Rzany B, editors. *Evidence-Based Dermatology*. 2nd ed. Malden, Massachusetts: Blackwell Publishing; 2008: 111-110
- [7]. Isidore KY, Sarah KH, Alexandre KK. Clinical and epidemiological aspect of black African adult women with facial dermatoses. *Dermatol Open J.* 2017;2(2):31-5.
- [8]. Ravindranath M, Swroop MR, Ghosh A, Devaraj Y, Shale K S M, Krishn ZS. A clinico-epidemiological study on various patterns of facial dermatoses in adolescents attending a rural tertiary center: a cross-sectional study. *IP Indian J Clin Exp Dermatol* 2020;6(2):126-135.
- [9]. Radhamani M, Rahim JA. Skin disorders of the face in adolescent population. *Int J Sci Res.* 2015; 5:1793-4.
- [10]. Arun Achar, Sanjay K Rathi. Melasma: A Clinico-epidemiological study. *Indian J Dermatol.* 2011 Jul-Aug; 56(4):380-382

- [11]. Gopalan G, Gopinath SR, Kothandaramasamy R, Pandian S. A clinical and epidemiological study on discoid lupus erythematosus. *Int J Res Dermatol* 2018; 4:396-402
- [12]. Dhar S, Kanwar AJ. Discoid Lupus Erythematosus in northern India: A study of 102 patients. *Ind J Dermatol.* 1996;41(4):118-21
- [13]. Insawang M, Kulthanan K, Chularojanamontri L, Tuchinda P, Pinkaew S. Discoid lupus erythematosus: Description of 130 cases and review of their natural history and clinical course. *J Clin Immunol Immunopathol.* 2010;2(1):1-8.
- [14]. Bajaj DR, Devrajani BR, Matlani BL. Discoid Lupus Erythematosus: A Profile. *J Coll Physicians Surg Pak.* 2010;20(6):361-4.
- [15]. Hemalingiah M, Chekuri R, Veeresh. Clinico-epidemiological study of facial dermatoses among adolescents. *Int J Res Dermatol* 2020; 6:25-30.
- [16]. Kumar S, Mahajan BB, Kaur S, Yadav A, Singh N, Singh A. A study of BasalCell Carcinoma in South Asians for risk factor and clinicopathological characterization: A Hospital based study. *J skin cancer.* vol-2014, Article ID 173582, 9 pages
- [17]. Zargaran M, Moghimbeigi A, Shojaei S. Aclinicopathological survey of Basal cell carcinoma in Iranian population. *J Dent (Shiraz).* 2013 Dec; 14(4):170-177.
- [18]. Lotfinejad S, Rashidi T, Eshghi MJ. Prevalence of malignant skin tumors among patients referring to URMI health centers, 1991-2001. *J Ardabil Univ Med Scien (JAUMS)* 2004; 3:33-38
- [19]. Hakimi N. The study of main factors of effective epidemiological & etiological on divulging basal cell carcinoma of head & neck in hospitalized patients with the same diagnosis in Shahid Beheshti Hospitalin Zanjan Univ Med Scien and Health Services. 2000; 8:21-28
- [20]. Bhattarai S, Agarwal S, Rajal A. Clinico-epidemiological profile of rosacea at a tertiary care hospital in eastern Nepal. *Vol.10, No 1, 2012*
- [21]. Ankad BS, Miskin AT, Math MK, Sakhare PS. Calcinosis cutis mimicking xanthoma: A case report. 2018;9(1):95-96.
- [22]. Owczarek W, Targowski T, Kozera-Zywczynk A, Paluchowska E, Patera J. Lupus vulgaris as a complication of pulmonary tuberculosis—case report. *Pol Merkur Lekarski.* 2009 Oct;27(160):326-30.
- [23]. Venkatesan R, Baskaran R, Asirvatham AR et al. *BMJ case report.* Doi: 10. 1136/bcr-2017-220628

Master Table

Table – 2: Relative prevalence and sex distribution of various nasal lesions

| S.L | Etiological classification | Lesions | Frequency | Percentage | Female | Male |
|-----|--------------------------------|-------------------------------------|-----------|------------|--------|------|
| 1. | Inflammatory conditions | Seborrhoeic dermatitis | 6 | | 0 | 6 |
| | | Rosacea | 4 | | 3 | 1 |
| | | Allergic contact dermatitis | 2 | | 2 | 0 |
| | | Irritant contact dermatitis | 1 | | 0 | 1 |
| | | Lupus pernio | 1 | | 1 | 0 |
| 2. | Pigmentary conditions | Melasma | 8 | | 5 | 3 |
| | | Post inflammatory hyperpigmentation | 2 | | 0 | 2 |
| | | Freckles | 1 | | 1 | 0 |
| | | Sebomelanosis | 2 | | 1 | 1 |
| | | Vitiligo | 1 | | 0 | 1 |
| 3. | Autoimmune disorders | Discoid lupus erythematosus | 10 | | 2 | 8 |
| | | Acute Lupus erythematosus | 1 | | 1 | 0 |
| | | Morphea | 1 | | 0 | 1 |
| 4. | Infectious conditions | Tinea faciei | 4 | | 3 | 1 |
| | | Impetigo | 3 | | 0 | 3 |
| | | Furuncle | 3 | | 0 | 3 |
| | | Herpes simplex | 2 | | 0 | 2 |
| | | Conidiobolomycosis | 2 | | 0 | 2 |
| | | Carbuncle | 1 | | 0 | 1 |
| | | Lupus vulgaris | 1 | | 0 | 1 |
| | | Hansen’s BT | 1 | | 0 | 1 |
| 5. | Tumor & Cysts | Rhinophyma | 2 | | 0 | 2 |
| | | Comedones | 4 | | 3 | 1 |
| | | Sebaceous hyperplasia | 3 | | 1 | 2 |
| | | Milia | 1 | | 1 | 0 |

| | | | | | | |
|----|--|------------------------------|---|--|---|---|
| | | Trichoepithelioma | 1 | | 1 | 0 |
| | | Venous malformation | 1 | | 1 | 0 |
| 6. | Nevus & Genodermatoses | Compound nevus | 2 | | 1 | 1 |
| | | Congenital melanocytic nevus | 1 | | 1 | |
| | | Plexiform neurofibroma | 1 | | 1 | |
| | | VEN | 1 | | 1 | |
| 7. | Malignant conditions | Basal cell carcinoma | 3 | | | 3 |
| | | Melanoma | 2 | | 1 | 1 |
| | | Keratoacanthoma | 1 | | | 1 |
| | | Lethal midline granuloma | 1 | | | 1 |
| 8. | Bullous disorder | Pemphigus vulgaris | 1 | | | 1 |
| 9. | Other dermatoses involving nose | Keloid | 3 | | 3 | |
| | | Acanthosis nigricans | 1 | | | 1 |
| | | Steroid atrophy | 1 | | | 1 |
| | | Hypertrophic scar | 1 | | | 1 |
| | | Calcinosis cutis | 1 | | | 1 |

Illustration



Fig 1 & 2 : DLE of nose



Fig : Morphea of nose



Fig : Hypertrophic scar



Fig: Congenital melanocytic nevus



Fig : Vitiligo of nose



Fig : Verrucous epidermal nevus



Fig : BCC of nose



Fig : Rhinophyma of nose





Fig : Melanoma of nose



Fig : Lethal midline granuloma



Fig: Compound nevus



Fig : Melasma of nose



Fig : Herpes simplex involving nose



Fig : Tinea faciei



Fig : Lupus vulgaris of nose



Fig: Conidiobolomycosis



Fig : Venous malformation of nose



Fig : Calcinosis cutis of nose with xanthelasma palpebrarum



Fig : Comedone

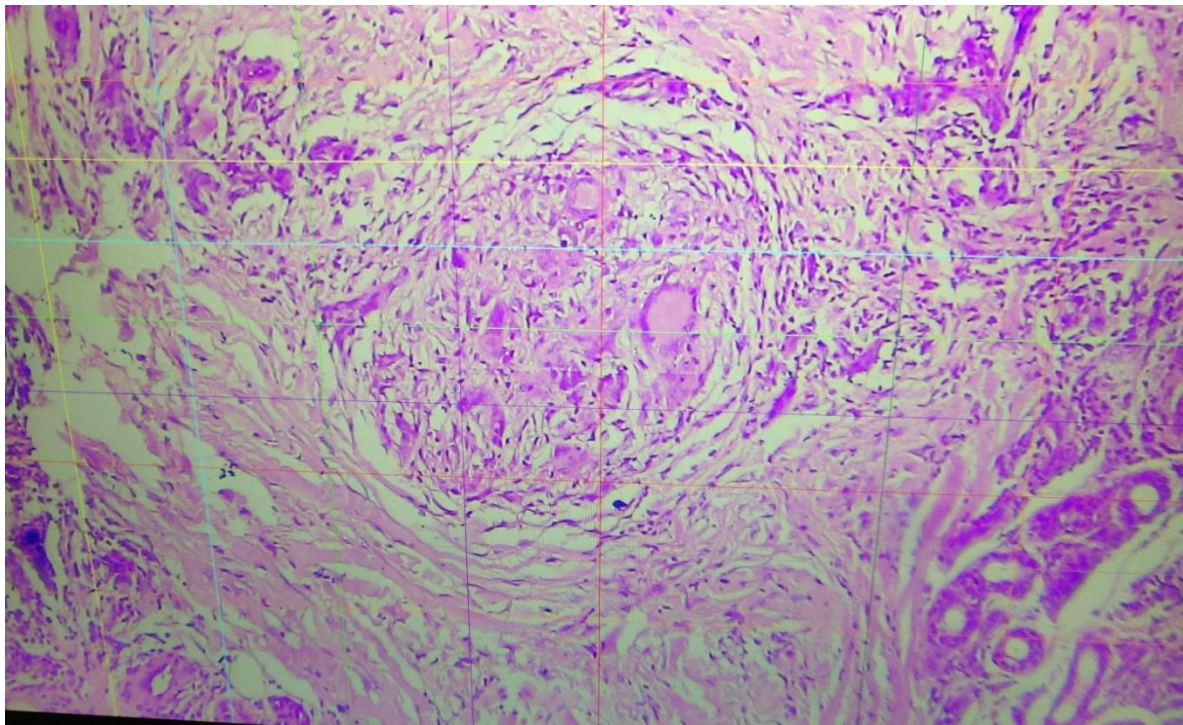


Fig : H & E (40X) showing epithelioid granuloma with Langhans giant cell in Lupus vulgaris

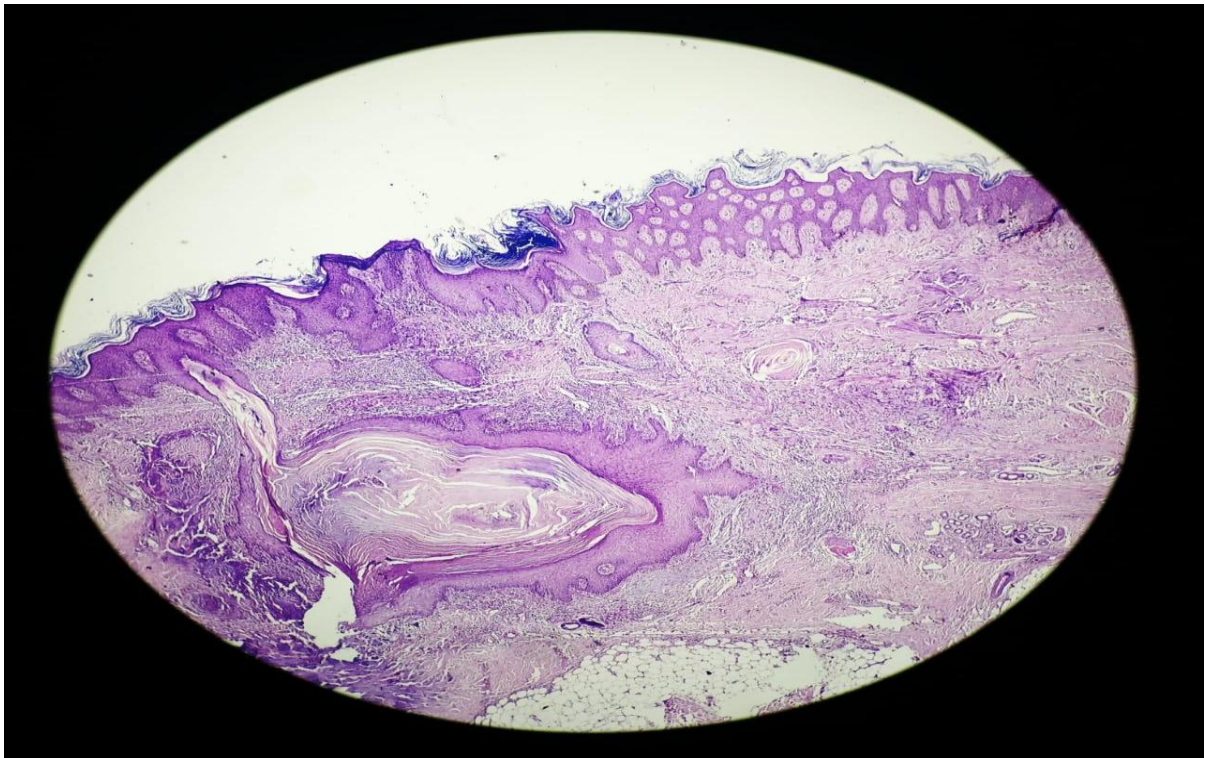
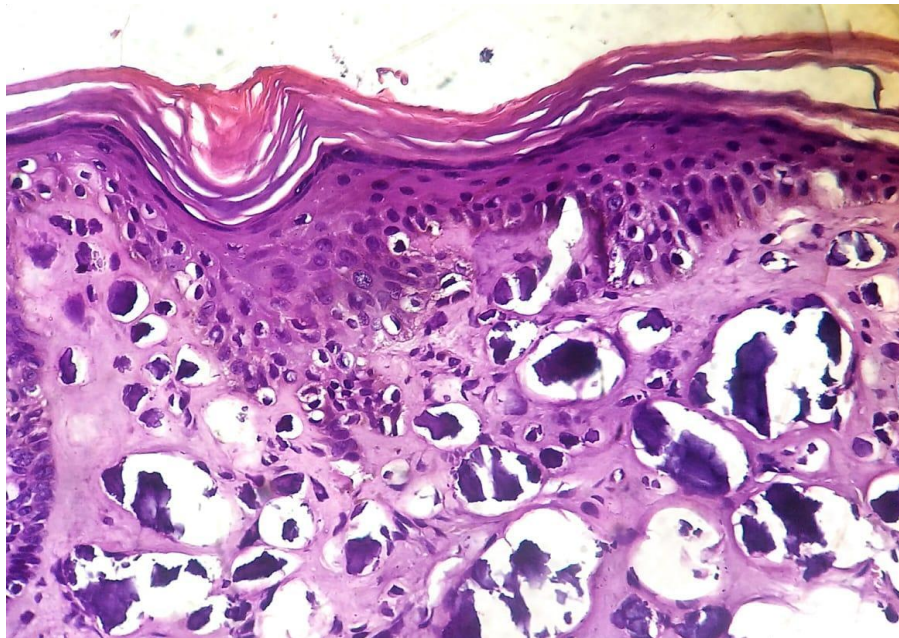


Fig : H & E (10X) of Keratoacanthoma shows Squamous proliferative lesions with central crater filled with keratin. The epidermis extends over the sides of crater like a lip or buttress. There are horn cysts.



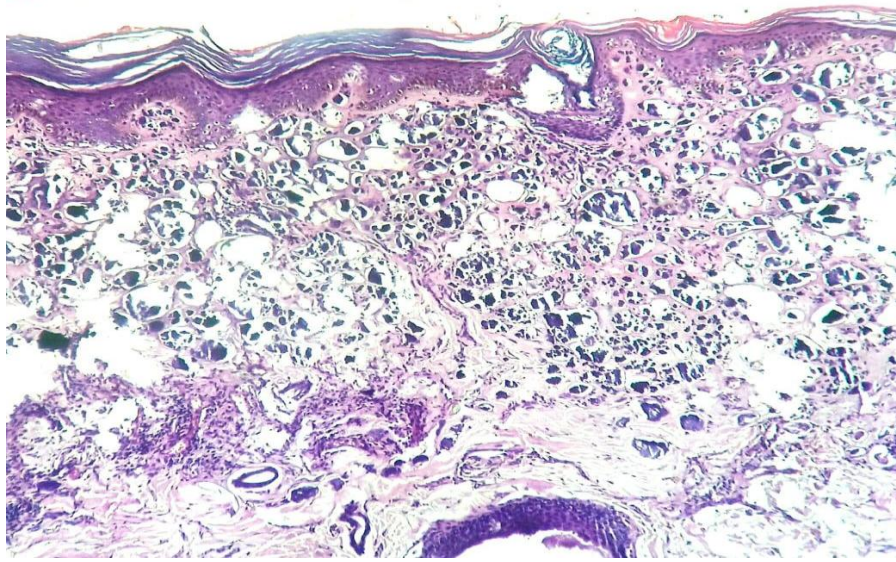


Fig : foam cell containing calcium deposition in calcinosis cutis of nose

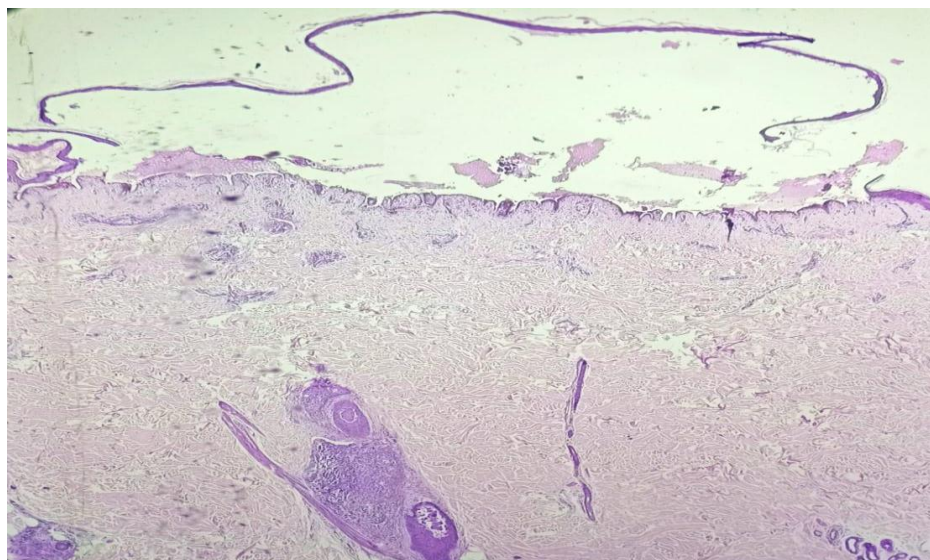


Fig : H & E of Pemphigus vulgaris showing suprabasal separation of epidermis from dermis with presence of acantholytic cells.

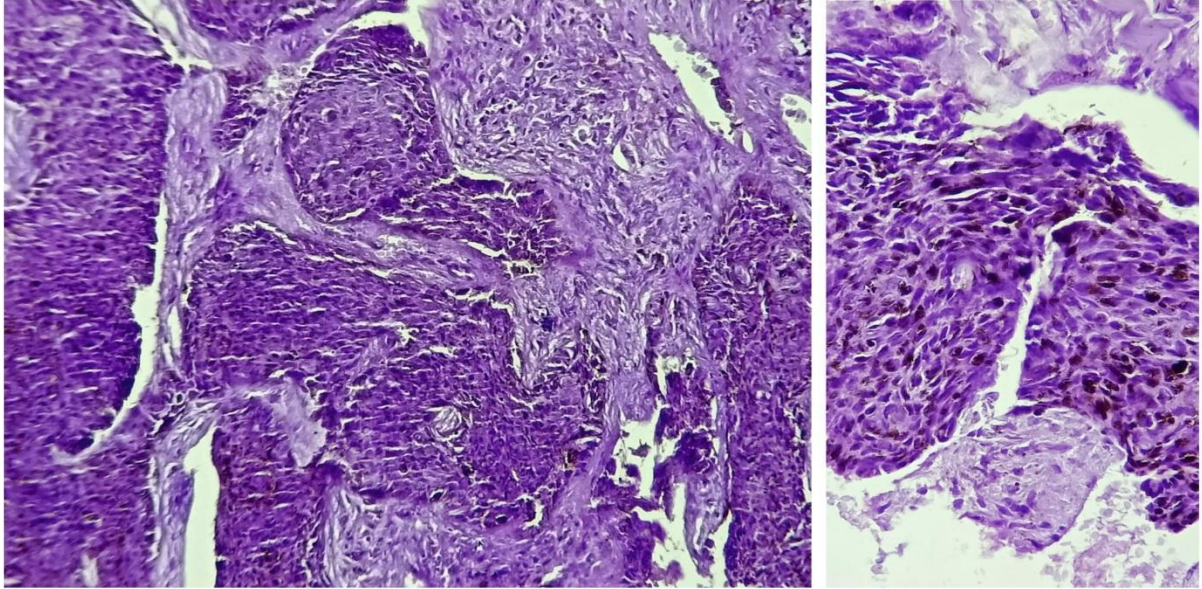


Fig: H & E of BCC showing nest of basaloid cell in the dermis with peritumoral lacuna & palisading arrangement of peripheral cell layer of tumor mass.