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# A STUDY ON HISTOPATHOLOGICAL STRATIFICATION OF PIGMENTED LESIONS OF SKIN IN A TERTIARY CARE CENTER

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**Abstract:**

**Background:** Hyperpigmentary skin disorders may be defined as increased pigmentation of the skin and/or mucus membranes due to melanin pigment. Hyperpigmentation may be caused by abnormality in epidermis or dermis. Hyperpigmentary skin disorders may be broadly classified into two groups, epidermal which is characterized by 'Brown hyperpigmentation' and dermal which is known as 'blue hyperpigmentation' or 'Ceruloderma.' Pigmented lesions can be close mimickers of melanoma and clinically challenging to diagnose. These can be melanocytic or non-melanocytic pigmented disorders. Pigmented lesions are closemimickers of melanoma andhistopathology is a cornerstone for diagnosing these lesions. Pigmented skin lesions comprise a large component of most histopathologists' workload, and although there is a wide spectrum of histological appearances most can be reported as simple benign naevi. Histopathological examination in several studies revealed epidermal pigmentation as the commonest finding followed by dermal pigmentation with or without hyperkeratosis.

**Aims and Objectives:** To study the histopathological patterns of pigmented lesions of the skin and to stratify and differentiate the pigmented lesions of skin from melanoma based on histopathology **.**

**Materials and Methods:** A total of 60 histologically diagnosed cases of pigmented lesions of the skin were retrospectively studied from January 2021to January 2023 in department of Pathology, Government Medical College, Jagtial,Telangana. Clinically suspicious skin lesions were taken up for the study. Sections from theskin punch biopsies and wide excision of the lesion were processed, stained with Hematoxylin and Eosin stain and studied for its histomorphologicalfeatures.

**Results:** Out of the 60 cases studied, 24 (40%) cases were melanocytic lesions including 10 (16.7 %) cases of Malignant melanoma , Benign Naevi- 14 (23.3%)cases and Dysplastic naevi - 2 (3 %) cases and out of the total 60 cases, 36 (60%) cases were non-melanocytic lesions including Lichen planus: 18(30%) cases , Seborrheic keratosis- 10 (16.7%) cases , Actinic keratosis -2 (3.3%) and Basal cell carcinoma- 6 (10%) cases.

**Conclusion:** Pigmented lesions include both melanocytic as well as nonmelanocytic lesions. the Melanocytic lesions, our study found predominantly melanoma cases . And in non melanocytic lesions lichen planuswas in majority cases. For proper diagnosis and definitive treatment of individuals with pigmented skin lesions, a good clinical correlation and biopsywith histological diagnosis are required. It distinguishes melanocytic from nonmelanocytic tumours and aids in tumour subtyping and grading.

## INTRODUCTION

Hyperpigmentary skin disorders may be defined as increased pigmentation of the skin and/or mucus membranes. Hyperpigmentation may be caused by abnormality in epidermis or dermis. Hyperpigmentary skin disorders may be broadly classified into two groups, epidermal which is characterized by 'Brown hyperpigmentation' and dermal which is known as 'blue hyperpigmentation' or'Ceruloderma.' [1,2]

Melanin is the major pigment that determines skin colour. Melanin is created by epidermal melanocytes by enzymatic tyrosine oxidation, a process known as melanogenesis that occurs within particular organelles known as melanosomes.

Pigmented skin lesions comprise a large component of most histopathologists' workload, and although there is a wide spectrum of histological appearances most can be reported as simple benign naevi. Benign naevi and

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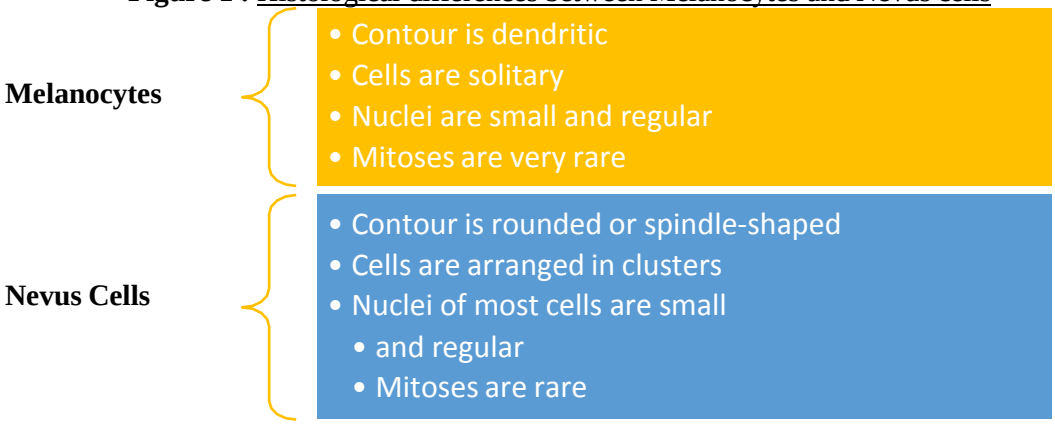
malignant melanocytic lesions are examples of melanocytic lesions. Melanocytic naevi are benign melanocytic lesions, whereas malignantmelanocyte lesions are malignant melanomas. These can be clinically difficult to distinguish from one another. [3]

Melanocytic nevi are benign growths of a kind of melanocyte known as a "nevus cell." The two primary distinctions between regular melanocytes in the basal layer of the epidermis and nevus cells are:

Nevus cells form nests in the lower epidermis and/or dermis, whereas epidermal melanocytes are distributed equally as solitary units.
Except in blue nevi, nevus cells do not have dendritic processes.
Melanin can be produced by both melanocytes and nevus cells. Melanocytic nevi can be born or acquired. Acquired nevi are classed as common (banal) or unusual, with various varieties such as halo nevi, blue nevi, and Spitz nevi. [4]

**Figure 1 :** Histological differences between Melanocytes and Nevus cells




"Melanocytic lesions are significant because malignant melanoma, which accounts for only 1% of skin cancers, accounts for more than 60% of cancer- related deaths."

Non-melanocytic lesions include lichen planus, seborrheic keratosis, pigmented basal cell carcinoma, and others. Melanocytic nevi are most common during adolescence. These naevi are thought to have begun as junctional nevi, progressed to compound nevi, and then become intradermal nevi.

"Hippocrates initially characterised cutaneous malignant melanoma as a "black cancer." Rene Laennec invented the term "melanoma." In 1806 he characterised the sickness for the first time." [1,5]
The incidence peaks in the sixth decade of life. Because of the disease's link with sunlight exposure in Western nations, the head and neck are the most typical sites of dissemination. However, in India, it occurs at the extremities and is not associated with solar exposure.

The WHO histological classification of melanoma includes superficial spreading, nodular, lentigo maligna, acral lentiginous, desmoplastic,melanoma arising from blue nevus and those arising in giant congenital naevi, childhood, naevoid, and persistent melanoma, all of which originate almost invariably from melanocytes at the epidermal-dermal junction.

Clark and colleagues pioneered the notion of radial and vertical development phases in malignant melanoma progression.
Clark's level of invasion: Has a prognostic and descriptive value.
Level 1- confined to dermis
Level 2- Invasion into papillary dermis
Level 3- Invasion into papillary and reticular dermis interfaceLevel 4- Invasion into reticular dermis
Level 5- Invasion into subcutaneous fat

"In India and other Asian studies, acral lentiginous type was the most common type of Malignant Melanoma.

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While in Western studies, majority were superficial spreading melanoma." However, "in an Indian study, superficial melanoma was the most common followed by acral lentigo", and contrarily the present study, shows acral lentiginous melanoma as the most common (59.4%) Malignant melanoma followed by superficial melanoma. [6,7]

Benign tumors of nevus cells are called melanocytic nevi, while malignant tumors are called malignant melanomas. Melanocytic lesions are important as malignant melanoma which accounts for only 1% of skin cancers, is responsible for over 60% of cancer related deaths. According to World Health Organisation, the number of melanoma cases worldwide is increasing faster than any other cancer.Nevi and other benign pigmented lesions, except for their cosmetic significance, are important as simulants of melanoma and as potential precursors of melanoma. [8]

**Melanocytic nevi:** Melanocytic nevi are only rarely present at birth, most appear in adolescence and early adulthood. There are transitional stages in the life cycle of nevi, which are believed to start out as junctional nevi, then compound nevi and having become intradermal nevi, undergo involution.

**Malignant melanoma:** The term "black cancer" was first used to describe cutaneous malignant melanoma by Hippocrates in the fifth century BC. In 1806, Rene Laennec provided the first description of melanoma as a disease entity and also marks the first published use of the word melanoma.The peak incidence is around the sixth decade of life. The large majority are associated with sunlight exposure. Therefore most are found in the head and neck area and lower extremity, the latter being particularly common in females.

**Dysplastic Nevus:** Dyplastic nevi are found between benign melanocytic nevi and malignant melanoma. Munro was the first to describe the macroscopic and microscopic appearance of Melanocytic Dysplastic Nevus (MDN) in 1974.

Clark *et al*. released the first study in 1978 that established MDN as a distinct pathological entity linked with an elevated risk of melanoma. [1,3,5]

Dysplastic nevi have aberrant clinical and pathological characteristics, making them essential as melanoma stimulants. Histologically, they have three distinct features: lentiginous hyperplasia, random cytologic atypia, and a stromal response. A fourth trait, architectural atypia, is widely recognised as a diagnostic necessity.

Pigmented variations of nonmelanocytic lesions defy clinical identification and can mimic melanocytic lesions such as melanoma. Seborrhoeic keratosis, basal cell cancer, actinic keratosis, dermatofibrosarcoma protuberans, and follicular cyst are examples of such mimickers. [5,6] Crasta *et al*. (2002) conducted a research to determine the proportion of lesions with pigmented variations in which histological testing assisted in confirming or refuting the clinical diagnosis.

In their investigation, seborrhoeic keratosis was the most prevalent lesion presenting with such clinical difficulties, followed by basal cell carcinoma, actinic keratosis, and dermatofibrosarcoma protuberans. 9,10

## MATERIALS AND METHODS

From January 2021 to January 2023, 60 histologically identified instances of pigmented skin lesions were evaluated retrospectively at the Department of Pathology, Government Medical College, Jagtial, Telangana.

The location of the lesion and histomorphological traits were obtained from the Department of Pathology's archives. The study's goal was to include clinically identified pigmented skin lesions. On small lesions, skin punch biopsies were conducted, whereas on bigger lesions, excision biopsy was performed. Biopsy samples were regularly preserved in 10% formalin for histopathological processing. The sections were cut and stained with hematoxylin and eosin. Biopsies were examined in depth, as well as epidermaland dermal characteristics.

### Inclusion criteria

The study covered both neoplastic and non-neoplastic pigmented skin lesions from all age groups and both genders.

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**Exclusion criteria**
Inadequate biopsy specimens and skin biopsies other than pigmented lesions were eliminated from the research.

**RESULTS**
Out of the 60 cases studied, 24 (40%) cases were melanocytic lesions including 10 (16.7 %) cases of Malignant melanoma , Benign Naevi- 14 (23.3%)cases and Dysplastic naevi - 2 (3 %) cases and out of the total 60 cases, 36 (60%) cases were non-melanocytic lesions including Lichen planus: 18 (30%) cases , Seborrheic keratosis- 10 (16.7%) cases , Actinic keratosis -2 (3.3%) andBasal cell carcinoma- 6 (10%) cases .
Table No.1 : Distribution of Neoplastic pigmented skin lesions based on itshistopathology

| Lesions | No. of cases | Percentage (%) |
|---|---|---|
| ❖ Melanocytic = | 24 | (40%) |
| Benign melanocytic naevi | 14 | (23.3%) |
| Dysplastic naevi | 2 | (3 %) |
| Malignant melanoma | 10 | (16.7 %) |

Non melanocytic=36 (60%)

- Lichen planus 18 (30%)
- Seborrheic keratosis- 10 (16.7%)
- Actinic keratosis 2 (3.3%)
- Pigmented BCC 6 (10%)

❖ Total cases = 60 (100%).

These cases are distributed in the age group of 16 years to 85 years. The distribution of these lesions was found more in males (62%) than in females (38%) .A pattern of gender distribution in individual lesions showed that Male to Female ratio in these lesions show a male preponderance in Malignant melanoma 8:1,, Seborrhoeic keratosis 4:2, Basal cell carcinoma 5:3 and lesions more common in females were Lichen planus 1:4 and Benign Naevi 1:6.

The extremities are the most prevalent location of distribution for pigmented skin lesions, followed by the head, neck, and trunk. 70% of benign naevi instances occur in the head and neck area, 100% of malignant melanoma cases occur in the extremities, and 70% of Seborrhoeic keratosis cases occur in the extremities. Basal cell carcinoma occurs in 100% of cases in the face, head, and neck area, while lichen planus is most frequent in the extremities.

The most prevalent melanocytic lesions (23.3%) are benign melanocytic nevi. The majority of occurrences occur in people aged 50 to 70(70%).

Melanomas were the second most prevalent (16.7%), and they might develop in the epidermis, be in situ, or invade the dermis.

In our investigation, three instances of Nodular melanoma, four cases of Acral lentiginous melanoma, two cases of NOS melanoma, and one case of cutaneous myxoid melanoma were evaluated.

Tumour cells are mostly epithelioid to spindle in nature. Hyperparakeratosisand ulcerations are also prevalent. In our investigation, Clark's grading of malignant melanoma indicated grades 3 and 5 in 40% of instances, whereas grade 4 was detected in 20% of cases.

Benign naevus, commonly known as birthmarks, are benign melanocytic proliferations that can be congenital

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or acquired. In our investigation, we found naevi cells as well as other traits such as hyperkeratosis, parakeratosis, and acanthosis. Melanin pigments can be seen in a few nests of naevi cells. Ten of the 22 pigmented melanocytic lesions are benign naevi.

The symmetrical, tiny, and well confined lesions that these Naevi examinedexhibit. Melanocytes shrink when they go deeper into the dermis. Mitotic activity is lacking near the lesion's base.

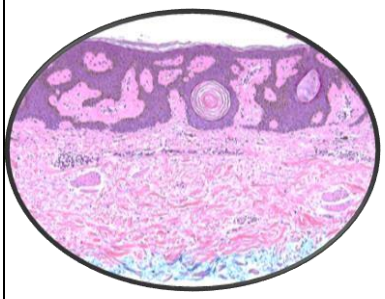
1. **Intradermal naevus:** It typically appears as an elevated,dome-shaped bumpon the surface of the skin. Naevi cells are predominantly present in the dermis.
2. **Cellular blue naevus:** Heavy infiltration of melanin pigments and non- nested dermal infiltration of naevuscells with associated fibrosis.
3. **Compound naevus:** Shows nests and cords of nevus cells in the intraepidermal and underlying dermis.
4. **Halo naevus:** Lymphocytic infiltration around the naevus cells.

There are 6 (10%) cases of BCC in this research. Despite the fact that BCC is the most common skin cancer, accounting for 80% of all skin cancers, malignant melanoma outnumbers BCC in our research. Multiple BCCs appear early in childhood in people with Basal cell nevus syndrome (Gorlin-Goltz syndrome).

**Table 2:** Specific Histopathological features of the lesions observed.

| | |
|---|---|
| **BenignNaevi** | ɣperkeratosis, Parakeratosis, Acanthosis, Naevi cells + Types(most common)- Intradermal Naevi ,<br>Other types- Compound naevi, Melanoctyic naevi, Naevus sebaceous ofJadassohn Epidermolytic veruccousepidermalnaevi |
| **Malignant Melanoma** | Hyperkeratosis, Parakeratosis, Acanthosis, Tumour cell type- Epithelioid to spindleshaped<br>Clark's grading (mostcommon)- Grade V Nodular type ,Acral lentiginous type<br>Nevoid melanoma , Cutaneous myxoidmelanoma |
| **Seborrhoeic Keratosis** | Hyperkeratosis, Parakeratosis, Acanthosis, OrthokeratosisHorn cysts + Lymphocytic infiltrate<br>Basaloid proliferation |
| **Basal cell Carcinoma** | Peripheral palisading Retraction artefactCystic change Inflammation Basaloid cells<br>ɔdular type is the most commonOther type- Gorlin-Goltz Syndrome |
| **LichenPlanus** | Hyperkeratosis Orthokeratosis Hypergranulosis Acanthosis Basal cell vacuolation , Band like infiltration, Max Joseph spaces, Civatte bodies |

**Table 3:** HISTOMORPHOLOGY PICTURES OF THE VARIOUS LESIONS

| | |
|---|---|
| **ɛborrhoeickeratosis** |  |
| **ɑnocyticnaevi** | |

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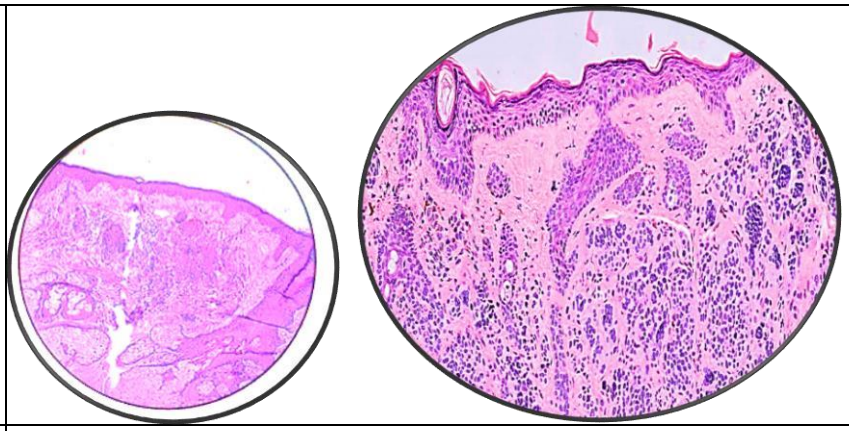
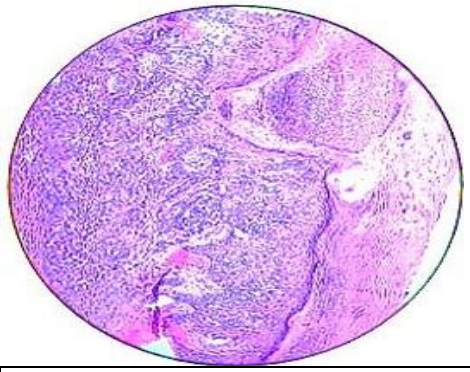
| | |
|---|---|
| |  |
| **Malignant melanoma** | |
| |  |
| **Halo naevus** | |
| **Lichenplanus** | |

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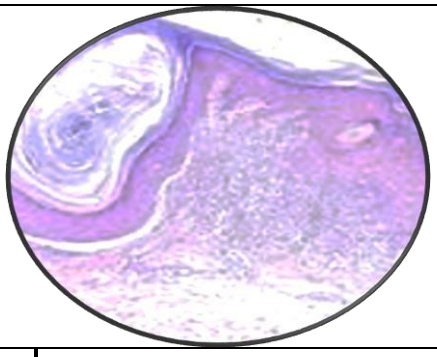
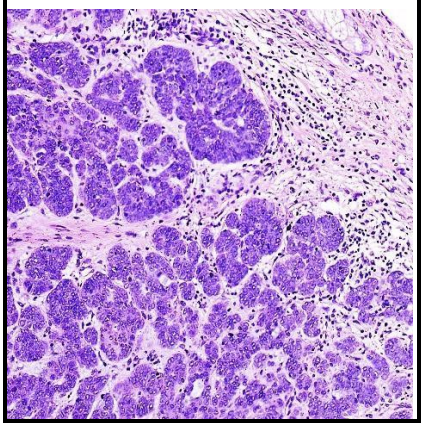
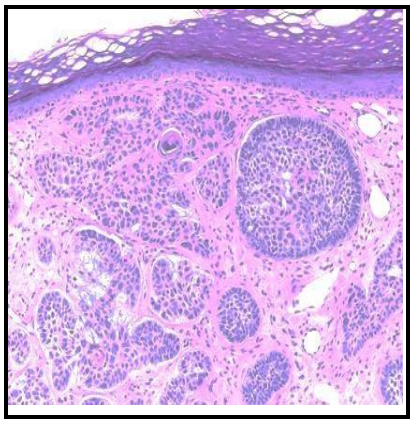
| | | |
|---|---|---|
| | |  |
| **BASAL CELL CARCINOMA** |  |  |

**DISCUSSION**

Pigmented lesions contribute a significant number of lesions biopsied for various reasons, but of primary concern is to rule out melanomas. There are various factors influencing the hyperpigmentation such as type of skin, working conditions, stress, sun exposure and autoimmunity. These disorders cause socio economic burden by creating social stigma among the individuals.

Out of the 60 cases studied, 24 (40%) cases were melanocytic lesions including 10 (16.7 %) cases of Malignant melanoma, Benign Naevi- 14 (23.3%) cases and Dysplastic naevi – 2 (3 %) cases and out of the total 60 cases, 36 (60%) cases were non-melanocytic lesions including Lichen planus: 18 (30%)cases, Seborrheic keratosis- 10 (16.7%) cases , Actinic keratosis -2 (3.3%) and Basal cell carcinoma- 6 (10%) cases.

The distribution of these lesions was found more in males (62%) than in females (38%) .A pattern of gender distribution in individual lesions showedthat Male to Female ratio in these lesions show a male preponderance in Malignant melanoma 8:1,, Seborrhoeic keratosis 4:2, Basal cell carcinoma 5:3and lesions more common in females were Lichen planus 1:4 and Benign Naevi 1:6.

These findings were consistent with the findings of VS Veldurthy *et al*, who showed that 31.5% of the 92 patients were between the ages of 21 and 30. [11]

Similarly, in the research of Laishram R *et al*, the majority of cases (32.2%) were between the ages of 21 and 30, with 14.7% falling between the ages of31 and 40. [12]

In the study of Younas M *et al*, 25% of the patients were between theages of 21 and 30. [13]
Goyal KK *et al* found the most instances (28%) in the age range of 21-30 years, followed by 26% in the age group of 31-40 years, for a total of 54% in the age category of 21-40 years. [14] Crasta J *et al*. (2002) found 53.84% instances in the 61-80 year age range, with a M:F ratio of 1.2:1. [9] Youl PH *et al* (2011) [15]found 52.41% of all cases in the >50-year-old age category, with aM:F ratio of 1.4: 1.

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**Distribution of lesions:**
In our analysis, 63.64% of patients had head and neck involvement, 22.73% had lower extremity involvement, and 13.64% had trunk involvement. Crasta J *et al*. (2002) found head and neck involvement in 70% of patients, trunkinvolvement in 20%, and lower extremity involvement in 10% of cases. [9]

Youl PH *et al*. (2011) found a greater percentage of trunk lesions (46.14%). [15]The majority of cases (44%), followed by solely upper limb involvement (25%), were involved in the current investigation. In 20% of instances, the entire body (chest, abdomen, back, and limbs) was implicated. The current study's findings were strikingly similar to those of Smitha M *et al* and Adhikari RC *et al*, who discovered that the upper and lower extremities werethe most often afflicted areas in cases with hyperpigmented skin lesions. [16]

Malignant melanoma: There were 5 cases of malignant melanoma in this research. All lesions revealed juntional activity at the dermaepidermal junction histologically. There were both epitheloid and spindle cells present. In our investigation, Clark's grading of malignant melanoma indicated grades 3 and 5 in 40% of instances, whereas grade 4 was detected in 20% of cases.

**Table 3:** Comparison Of Clark's grading of various studies.

| **STUDY** | **Hussein MR *et al* (2006)n=21 17** | **Konrad P *et al* (2011) n=72 18** | **Mukhopadhyay S *et al* (2008) n=21 19** | **Present study (2012)n=5** |
|---|---|---|---|---|
| GRADE 1 | --- | 18.2% | 29.2% | --- |
| GRADE 2 | 9% | 18.2% | 12.3% | --- |
| GRADE 3 | 14% | 36.2% | 32.3% | 40% |
| GRADE 4 | 28.57% | 18.2% | 26% | 20% |
| GRADE 5 | 47.61% | 19% | --- | 40% |

Clark's grading of malignant melanoma in the current research is equivalentto Hussien MR *et al* (2006) and Mukhopadhyay S *et al* (2008) investigations.

Crasta J *et al* (2002) discovered seborrheic keratosis and basal cell carcinoma to be the most prevalent nonmelanocytic lesions that mimic melanocytic lesions, including melanoma, in their study on pigmented lesions of nonmelanocytic origin. Melanocytic and non-melanocytic lesions are distinguished by the presence orabsence of melanocyte growth.

**Melanocytic lesions**
Out of the 60 cases evaluated, 24 (40%) were melanocytic lesions, comprising 10 (16.7%) instances of malignant melanoma, 14 (23.3%) cases of benign naevi, and 2(3%) cases of dysplastic naevi.
Several recent studies have found an increase in the incidence of cutaneous melanomas. "Panda *et al*," "Chang *et al*," and "Mukhopadhyay *et al*" revealed that 82% and 78% of the cases were of cutaneous origin, respectively. [19,20,21]

There were no non-cutaneous melanomas during our research period. However, cutaneous melanomas account for 17.1% of all melanocytic lesions.

Cutaneous malignant melanomas can develop spontaneously or as a result of an existing nevus.
Cutaneous melanoma is divided into four types: superficial spreading, lentigomaligna, nodular melanoma, and acral lentiginous melanoma. In our investigation, we discovered 12 instances, of which three were Nodular type, four were Acral lentiginous, three were NOS, one was Nevoid melanoma, and one was cutaneous myxoid melanoma.

In contrast to our findings, "Suvernekar *et al*." [22] and "Parvathi *et al*." [23] discovered that the most prevalent types of lesions were benign melanocytic naevi and pigmented BCC.

Although BCC is the most frequent skin cancer, the current study found thatthe number of patients identified with Malignant melanoma was greater thanthat of BCC. In a research conducted in West Bengal, "Panda *et*

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*al*." noted this recent shift in tendency. Many melanomas develop from pre-existing nevi, butthe most majority (>50%) develop from scratch. [20]

Asymmetry in size, form, and pigmentation of the nodules can be seen microscopically in nodular melanomas. Clarks grading was performed, and the bulk of the lesions were classified as Grade V. Similar research by "Shirazi *et al*." revealed that the majority of lesions occur in Clarks Grade III and IV. [24]
Five Grades are recognized, and higher the grade, orderis the prognosis.

These grades are:
Grade 1: Melanoma confined to the epidermis(melanoma in situ) Grade 2: Invasion into the papillary dermis
Grade 3: Invasion to the junction of the papillary andreticular dermis Grade 4: Invasion into the reticular dermis
Grade 5: Invasion into the subcutaneous fat.

**Benign Melanocytic naevi**
Although the transformation of benign naevi to malignant melanoma is debatable, research shows that rare melanoma have precursor lesions. Because these lesions might be clinically identical, it is critical to distinguishbetween benign naevi and malignant melanoma.

**Non-Melanocytic lesions :**
Non-melanocytic lesions included lichen planus (18 (30%), seborrheic keratosis(10 (16.7%), actinic keratosis (3.3%), and basal cell carcinoma (6 (10%).

Lichen planus was the most prevalent kind of lesion detected in our investigation, which was consistent with the findings of "Shushan *et al*."

The age range for these instances ranged from 8 to 92 years. With a few exceptions, the majority of cases were in the 41-50 age range. Lichen planus was discovered to be more frequent in younger individuals.

The extremities were the most prevalent location of distribution for pigmented skin lesions, followed by the head, neck, and trunk. 70% of benignnaevi cases were found in the head and neck area, 100% of malignant melanoma cases were found in the extremities, and 70% of Seborrhoeic keratosis cases were found in the extremities. Basal cell carcinoma was foundin 100% of patients in the face, head, and neck area, with lichen planus most usually seen in the extremities. These findings were quite similar to those obtained by "Parvathi *et al*." in a 2017 research. [23]

The current investigation comprised two cases of dysplastic naevi, neither of which was clinically identified. Grob JJ et colleagues (1988) [26]shown that diagnosing dysplastic naevi solely based on clinical criteria is challenging and inaccurate.

In their investigation on melanocytic naevi, Kwok YK et colleagues (2001)
[25]found a lack of clinicpathological concordance in dysplastic naevi.

**Basal cell carcinoma**
BCC is the most prevalent kind of skin cancer, primarily affecting the head and neck. Biopsies from our investigation revealed stratified squamous epithelium with underlying nests of basaloid cells and palisading cells at the periphery. The nuclei of tumour cells are hyperchromatic.

Melanocytes and melanophages nests are seen in the surrounding stroma. In comparison to trabeculae and infiltrative patterns, solid patterns were the most prevalent. There were six (10%) incidences of basal cell carcinoma.

Anderson WK *et al* (1991) discovered two subgroups of melanoma that defy clinical identification in their research of 178 instances of malignant melanoma, one of which is mistaken for basal cell carcinoma and the other with verrucous look is confused for seborrheic keratosis.

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**Lichen planus**

It is a self-limiting eruption that primarily affects young individuals, with a female predominance. Histomorphologically, the most prevalent characteristics were hyperkeratosis, orthokeratosis, acanthosis, hypergranulosis, band-like infiltration, and basal cell vacuolation.

Max Joseph spaces and Civatte bodies were not found in the current investigation, although they are specific along with band-like lymphocyticinfiltration in the papillary dermis and basal cell vacuolation.

Pigment incontinence caused by basal cell destruction causes pigmentation in Lichen planus. In Lichen planus, ICAM-I (Intercellular Adhesion Molecule-1) expression is restricted to basal cells, resulting in leucocyte-dependent damageto basal keratinocytes.

Our findings were likewise comparable to those of Jayker SS *et al*, who found 11instances of Classical lichen planus, 6 cases of Lichen planus pigmentosus, 5 cases each of Prurigo nodularis and Psoriasis, 4 cases of Morphea, and 4 cases of Lichen simplex chronicus out of 85 patients. [28]

Saha R et colleagues found comparable results in their investigation, with Lichen planus and its variations accounting for 20 of 52 cases. [29]

**Seborrheic keratosis**

The most prevalent and distinctive histological signs of Seborrheic Keratosis were many enormous keratin-filled horn cysts and proliferation of basaloid cells in uneven sheets encircling the horn cysts. Seborrheic Keratosis has several histological types/variants. They are as follows: Acanthotic, Clonal, Hyperkeratotic, Adenoid/Reticulated, and Irritated.

Melanin is generally present in basal cells, and pigmentation in Seborrheic keratosis is caused by an increase in basal cell proliferation.

## CONCLUSION

Our research found an increase in the occurrence of cutaneous melanomas among melanocytic lesions. The preponderance of cutaneous melanomas among melanocytic lesions in our study leads us to assume that there is a growing trend of cutaneous melanomas in South India, which is currently regarded rare. This research focuses on a young man who has Gorlin Goltz syndrome. For a better understanding, pigmented lesions in our study are divided into melanocytic and non-melanocytic lesions. As a result, the study emphasises histomorphological analysis of pigmented skin lesions, which remains the cornerstone in detecting cutaneous melanomas.

Pigmented lesions are classified as either melanocytic or nonmelanocytic. For the correct diagnosis and definitive treatment of individuals withpigmented skin lesions, a good clinical correlation and biopsy with histological diagnosis are required. It distinguishes melanocytic from nonmelanocytic tumours and aids in tumour subtyping and grading.

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