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# A STUDY OF HISTOPATHOLOGICAL SPECTRUM OF SKIN LESIONS IN DEPARTMENT OF PATHOLOGY , SRI SIDDHARTHA MEDICAL COLLEGE, TUMKUR

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**ABSTRACT**

**BACKGROUND**: Skin is a complex organ with many functions. It is the largest organ of the body. It protects the internal organs from the external stimuli and various infectious agents from the external environment. Skin diseases are more prevalent in developing countries. Histopathological examination is necessary for accurate diagnosis, identification of etiological agent and appropriate diagnosis. **Aims and Objectives**: Histopathological study is conducted to examine the incidence of various skin diseases with respect to age, sex, site of involvement, and nature of lesion. The study was conducted in Sri Siddhartha Medical College from 27$^{th}$ March to 8$^{TH}$ of April in Pathology Department. **Materials and Methods:** Retrospective study was conducted in the department of Pathology in Sri Siddhartha Medical College on skin biopsies irrespective of age, sex, site, nature and clinical diagnosis. **Results:** Out of 50 biopsies44 were non neoplastic and 6 were neoplastic , accounts to 88% and 12% respectively. Common age group was 20-40 years and predominantly seen in males. Lichen planus and basal cell carcinoma were the most common non neoplastic and neoplastic lesion respectively. **Conclusion:** Histopathological examination helps in accurate diagnosis and appropriate treatment.

Keywords:histopathology spectrum, skin lesions, department of pathology.

## Introduction

Skin has 3 layers, epidermis, dermis and subcutaneous layers. Skin is the largest organ of the human body. It acts as the barrier against various harmful factors such as environment and also maintains homeostasis. Skin diseases are the most prevalent diseases in the developing countries. In India skin diseases accounts 6.3% to 11.6%. It is the most exposed organ to the UV light and hence most susceptible to broad spectrum of disorders. This study aims to know the histopathological spectrum of skin lesions.

## Aims and Objectives

Study is conducted in pathology department of Sri Siddhartha Medical college to know the incidence of various skin diseases with respect to age, sex, site, and nature of the lesion.

Objectives:

1. To collect request forms related to histopathology of skin biopsy in Department of pathology.
2. To determine incidence of skin lesions.

3. To know the clinical and histopathological pattern of skin diseases.
4. To determine the distribution among the age and sex of the lesion.

## Materials and Method

Histopathology request forms of skin biopsies were collected from the files, clinical details and histopathological diagnosis were taken and analyzed from the Pathology Department of SSMC.

## Results

| SKIN LESIONS | NUMBER OF CASES |
|---|---|
| **NON NEOPLASTIC LESIONS** | |
| 1) Chronic Non-specific Dermatitis | 5 ( 10% ) |
| 2) Bullous Phemphigoid | 1 ( 2% ) |
| 3) Psoriasis Vulgaris | 3 ( 6% ) |
| 4) Pemphigus Vulgaris | 1 ( 2% ) |
| 5) Phytophotodermatitis | 2 ( 4% ) |
| 6) Granuloma Dermatitis | 2 ( 4% ) |
| 7) Lichen Sclerosus | 1 ( 2% ) |
| 8) Erythema multiforme | 2 ( 4% ) |
| 9) Discoid Lupus Erythematosus | 4 ( 8% ) |
| 10) Lichen Planus | 6 ( 12% ) |
| 11) Hyperkeratosis | 1 ( 2% ) |
| 12) Chronic Inflammatory Lesion of Skin | 2 ( 4% ) |
| 13) Pityriasis Lichenoides Chronica | 1 ( 2% ) |
| 14) Epidermo Dysplasia Verruciformis | 1 ( 2% ) |
| 15) Biphasic Amyloidosis | 1 ( 2% ) |
| 16) Post Inflammatory Hyperpigmentation | 1 ( 2% ) |
| 17) Leprosy | 3( 6% ) |
| 18) Drug Eruptive Rash | 1 ( 2% ) |
| 19) Pityriasis Rubra Pilaris | 1 ( 2% ) |
| 20) Benign Calcified Cyst | 1 ( 2% ) |
| 21) Vascultis | 1 ( 2% ) |
| 22) Granuloma Annulare | 1 ( 2% ) |
| 23) Dermatofibroma | 2 ( 4% ) |
| **Neoplastic lesion** | |
| 1) Squamous Cell Carcinoma | 2 ( 4% ) |
| 2) Verrucous Carcinoma | 1 ( 2% ) |
| 3) Basal Cell Carcinoma | 3 ( 6% ) |

Out of 50 biopsies, 44 were non neoplastic and 6 were neoplastic. Non neoplastic accounts to 88% of the lesions and neoplastic lesions account 12 %.

Most common non neoplastic skin lesions found is lichen planus with 6 cases, accounting 12% of skin lesions and followed by chronic non specific dermatitis accounting for 10% with 5 cases and next lined up is discoid lupus erythematosus with 4 cases accounting to 8%. Leprosy and psoriasis vulgaris accounts to 6% with 3 cases each and dermatofibroma, chronic inflammatory

lesion, erythema multiforme, granuloma dermatitis and phytophoto dermatitis accounts to 2 cases and 4% of lesion. Rest are granuloma annularae, vasculitis, benign calcified cyst, pityriasis rubra pilaris, drug eruptive rash, post inflammatory hyperpigmentation, biphasic amyloidosis, epidermo dysplasia verruciformis, lichenoides chronica, hyperkeratosis, lichen sclerosius, bullous phemphigoid, phemphigus vulgaris accounts to 1 case each and 2% of lesion.

Among neoplastic lesion highest occurrence is seen in basal cell carcinoma with 3 cases accounting to 6%, followed by squamous cell carcinoma, accounting to 4% of lesion with 2 cases and verrucous carcinoma with 1 case accounting to 2% of lesion.

Among 50 cases 36 were males and 14 were females showing male predominance.

24 cases were between the age of 20 to 40 years.

## Discussion

In our study the highest frequency of skin diseases is seen in above 20 years and below 40 years, similar to Bezbaruah R.[2] and Abubakar SD.[3] where highest frequency was in 21–30 years of age and Adhikari RC.[1] found the highest frequency in 31–40 years of age

Our study shows male predominance which was similar to Dayal et al.[4] and in contrast to female predominance in Bezbaruah R et al.[2] and Adhikari et al.[1]

In our study 88% of the cases are non neoplastic which is much higher in comparison with neoplastic skin lesion which is 12% However, in Bezbaruah R et al.[2] and Abubakar SD et al.[3]; neoplastic lesions observed as a major skin lesion entity in comparison to non-neoplastic lesion. Lichen planus being the commonest non neoplastic lesion observed similar to Agrawal S et al.[5]

Basal cell carcinoma was the commonest neoplastic lesion accounting to 12% of total skin lesions in contrast to study results of Thapa et al.[6]

Lichen planus and basal cell carcinoma are the most commonly observed neoplastic lesion. The skin lesions are predominantly seen in males and more common in 20-40 age group.

## Conclusion

Histopathological examination helps in accurate diagnosis and appropriate treatment of skin lesion.

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