Original Article

The prevalence of various skin lesions in a tertiary care center

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Abstract

Aims: The study was conducted to know the prevalence of various skin lesions in and around our hospital attending the outpatient department of dermatology over a period of three years from Jan 2014-Dec2016. The diagnosis was based on the clinical presentation of the patient and the biopsy report. **Materials and Methods:** A total of 216 cases of skin lesions over three years were taken for the study. Diagnosis was confirmed by histopathological examination with haematoxylin and eosin stain. **Results:** Out of 216 cases, 63 (29.17%) cases were neoplastic and 153 (70.83%) cases were non neoplastic. Among the non neoplastic lesions 45(29.41%) were reported under the category of non-infectious erythematous, papulo, squamous diseases, 34(22.22%) cases of infectious etiology, 30(19.61%) cases of non infectious vesiculobullous and vesiculopustular diseases, 10 (6.54%) cases of connective tissue disorders, 9(5.88%) cases of vasculitis, 7(4.58%) cases of dermatitis, 6(3.92%) cases of inflammatory diseases of subcutaneous fat.12(7.84%)cases were to be correlated clinically and was classified under miscellaneous category. **Conclusion:** Among the non neoplastic skin lesions, non-infectious erythematous, papulo,squamous lesions were frequently seen in our region with lichen planus being the most common lesion. Predominantely males were more affected with skin lesions in our study.
Keywords: Skin lesions,non neoplastic, non-infectious erythematous, papulosquamous diseases.

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INTRODUCTION

Skin is one of the largest organ of our body[1]. Dermatologic disorders are common in many countries but the spectrum varies greatly[9]. In India, dermatological diseases are one of the most common health problems.[2] Biopsy is the most common diagnostic technique for definitive diagnosis. The skin lesions are categorized either as neoplastic or non neoplastic. Non-neoplastic skin lesions forms the majority of the morbidity of skin diseases[3-7]. Correlation between the clinical, gross and histophathological diagnosis is often essential for accuracy of the diagnosis. Skin diseases are also influenced by various factors like environment, economy, literacy, racial and social customs.[8] The aim of this study is to analyse the prevalence of various skin lesions and classify them according to the morphology into various categories among the patients attending the outpatient department of dermatology in our hospital at Mangadu.

MATERIALS AND METHOD

The retrospective study was conducted on the punch and excision biopsy taken from patients attending the outpatient dermatological department of Sri Muthukumaran Medical Hospital from January 2014 to December 2016.The diagnosis was based on the clinical presentation of the patients and the histopathological examinations on hematoxylin and eosin stained tissue sections. Relative frequency of various lesions, distribution of age and sex were analyzed. A total number of 216 biopsy were retrieved from the archives. All tissue specimens were subjected to gross examination and dimensions were taken from archives. Patient's history

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such as age, sex, site of lesion and pattern were provided by dermatologist. The skin disorders were classified into various categories according to the histomorphology as non neoplastic and neoplastic. The non neoplastic lesions were further classified as non-infectious erythematous, papulo, squamous, Infectious lesions, non infectious vesiculobullous and vesiculopustular diseases, connective tissue disorders, vasculitis, inflammmatory and miscellaneous categories.

RESULT

A total of 216 patients were included in the study, out of which, 63 neoplastic cases (29.17%) and 153 non neoplastic (70.83%). Skin lesions were common in 35-45 years of age group.Among the total number of cases 114 cases (52.78%) were male and 102 cases (47.22%) were females. Non neoplastic skin lesions were more common in males(59.48%) than females(40.52%). In non neoplastic lesions, Lichen planus was almost equal in both male and female patients. The commonest lesions in males were bullous lesions followed by granulomatous lesions. Among the Granulomatous lesion Hansen's disease were most frequently reported in 25-50 years of age group which implies that diagnosis should be made mandatory to perform skin biopsy in young adults with suspicious clinical features. In vesiculo bullous lesions, bullous pemphigoid was more common. Inflammatory diseases of subcutaneous fat lesions showed female predisposition but Vasculitis lesions showed male predisposition. Among the non neoplastic cases 45(29.41%)were reported under the category of non-infectious erythematous papulosquamous diseases, in which lichen planus was most common followed by psoriasis and parapsoriasis. Infectious etiology was reported in 34(22.22%) cases in which leprosy was common next to tuberculosis and fungal infections. 30(19.61%) cases of non infectious vesiculobullous and vesiculopustular diseases. 10 cases (6.54%) of Connective tissue disorders, 9 cases (5.88%) of vasculitis were reported.7 cases(4.58%) of dermatitis was reported. Inflammatory diseases of the subcutaneous fat with 3.92% was least cases reported in our study. Few cases under the miscellaneous catogery were reported to correlate with clinical presentation. Among the neoplastic lesions, benign adnexal neoplams were common in our study with female predominance.

Table 1: Distribution of Skin Lesions

Type of skin lesions	Number	Percentage
Non neoplastic	153	70.83
Neoplastic	63	29.17

Table 2: Histopathological spectrum of non neoplastic skin disorders

Type of skin disorders	Male	Female	Total	Percentage
Non-infectious erythematous, papulosquamous	23	19	45	29.41
Infectious lesions	20	13	34	22.22
Non infectious vesiculobullous and vesiculopustular diseases	17	12	30	19.61
Connective tissue disorders	6	4	10	6.54
Vasculitis	7	2	9	5.88
Dermatitis	4	3	7	4.58
Inflammatory disease of subcutaneous fat	2	4	6	3.92
Miscellaneous	8	4	12	7.84
Total	**91**	**62**	**153**	**100**

DISCUSSION

The analysis of non neoplastic skin lesions subjected to histopathology are less than clinical based studies[4-7]. A total of 216 patients were included in the study, 118 cases (54.63%) were males and 98 cases (45.37%) were females. The sex distribution pattern relived that most of the patients were males.[9] The age distribution showed, youngest was 6 years old and oldest was 85 years old. Most patients were falling under the age group of <50 years; similar findings were also shown by emmanouil k s *et al*, 2006 in their study[10] .Of the total 153 cases of nonneoplastic skin lesions reported, there were 92 males (60.13%) and 61 females (39.87%) similar result was noted by singh *et al*., and rajput *et al*.,[11]. A large proportion of the cases in our study were 29.41% noninfectious erythematous papulosquamous diseases, which is similar to gulia1*et al*.[13] 22.2% of infectious diseases was followed by 19.61% vesicobullous and vesicopustular lesions. According to mohd yunus *et al* (2004)[12], erythematous, papulo, squamous diseases were seen more in males in comparison to females which was similar to our study. Lichen planus was more commonly occuring among the the erythematous, papulosquamous lesions.[14]According to mohd yunus *et al* (2004)[16] lichen planus may affect all the ages and incidence is equal in both sexes but distinctly rare in children the same was

seen in our study. The differential diagnosis between lichen planus and lichenoid reaction is based on the combination of clinical and classical histological features. The histologic criteria includes prominent granular layer, presence of band like lymphocytic infiltrate thought to be T lymphocyte in subepithelial connective tissue, hydropic degeneration of basal cell layer and absence of epithelial dysplasia.[15] According to narang *et al*, among the granulomatous lesions, leprosy was the most common[2,17] with similar finding in our study followed by tuberculosis. In our study, leprosy was seen more in males than females as by moorthy *et al* (2001).[16]

CONCLUSION

In our study 216 cases were compiled, out of which non-neoplastic lesions constituted 70.83 % of the total number of skin biopsies. The sex distribution pattern revealed a male preponderance. The most common skin lesion reported was non infectious erythematous, papulosquamous lesion (29.41%) with lichen planus being the commonest lesion among them. Hansen's was common among the infectious disease lesions and still remains a single entity in our area for which skin biopsy is mandatory in clinically suspicious cases. Histopathology was helpful in making the definitive diagnosis of non neoplastic skin disorders in 92.16% cases. This emphasizes the importance of histopathology in diagnosing non neoplastic skin disorders.

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