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Histopathology

A COMPARATIVE ANALYSIS OF THE OCCURRENCE OF SKIN TUMORS AT A TERTIARY CARE HOSPITAL

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ABSTRACT **BACKGROUND:** The skin is a complex organ in which a wide range of neoplastic and non-neoplastic diseases can develop Exposure to sun is the most common risk factor but genetic and environmental factors , also play an important role. All ages can be affected, however, the frequency of neoplasms increases with age Also there is an alarming increase among fair-skinned people.

MATERIAL & METHODS: All the biopsies and excision specimens submitted from may 2018 to june 2020.

RESULTS;Ttotal 51 specimens are studied, out of which 15 are benign and 36 are malignant. Epidermal lesions are34,adnexal lesions13,melanocytic lesions are four.

CONCLUSION; females are more commonly affected than males and squamous cell carcinoma is the commonest malignancy followed by basal cell carcinoma.

KEYWORDS : squamous cell carcinoma, adnexal tumors

INTODUCTION :

Classically, the skin tumors have been divided into those which differentiate from epidermal, dermal, appendageal and those derived systemically[1] Adnexal tumors arise from the appendages of the skin such as sweat glands, sebaceous glands and hair follicles[2]..Many times clinical diagnosis may not be accurate because of similarity in gross appearance. Then, histopathology alone remains a diagnostic tool and also yields a high percentage of pre malignancy. It indicates that all excised skin lesions must undergo histopathological examination so that malignancies are not at all missed.

MATERIAL AND METHODS ;

All the skin biopsies and excision specimens submitted to the Department of Pathology, for histopathological study. From July 2018 to June 2020. Prior approval obtained from ethical committee.

Specimens are collected in 10% formalin. Gross findings are noted and the tissues are processed for paraffin embedding. Cut into thin sections of 4-5 icrons and Sections- stained with Hematoxylin and Eosin stain.

RESULTS

Out of 51 specimens , benign lesions are 15 and malignant are 36. Out of these epidermal lesions are 34, adnexal lesions are 13, melanocytic lesions are 4. Out of benign lesions, seborrheic keratosis cases are 3, pilomatricoma are 3, hidradenoma are 3, one case of hidrocystoma, syringocystadenoma papilliferum are 2, sebaceous adenoma , intradermal nevus and ,compound nevus are one case each.

Out of 36 malignancies , squamous cell carcinoma(SCC) are17, verrucous carcinoma and melanoma are 2 each, merkel cell carcinoma 1, basal cell carcinoma 11,, and sebaceous carcinoma are three .Benign lesions are common in 5th to 6th decade and malignant above 60 yrs. With female preponderance.

Among eleven basal cell carcinomas reported pigmented variant are 7, solid variant , adenoid variant, nodular variant , infiltrating variants are one case each.

DISCUSSION

Skin neoplasms are ubiquitous that they can affect people of all ages and they are an ideal subject for study from clinical and morphological point of view. During the two-year study period from July 2018 to June 2020, there are a total of 51 cases of skin neoplastic lesions. Out 51lesions, malignant lesions are the most common constituting 71% followed by benign lesions of 29%.

In the present study, SCC accounted for a maximum number of cases (48%) which is similar to the observations made by Chakravorthy RC et al,[3] Deo SV et al[4] and Sonam Shaik et al.[5]

In the present study the most common malignancy is SCC (48%) followed by BCC (30%),adnexal carcinoma (8%), verrucous carcinoma (6%),malignant melanoma (6%) and Merkle cell carcinoma (2%).

In the study by Chakravorthy RC et al SCC (64.3%) is the most common type followed by BCC (16.5%), malignant melanoma (8.69%) and adnexal carcinoma (2.6%). In the study by Deo SV et al SCC is the most common type (55.8%) followed by malignant melanoma (26.1%) and BCC(18.1%).In the study by Sonam Shaik et al SCC(55%) is the most common followed by BCC (22.5%), verrucous carcinoma(9%), adnexal carcinoma (6.8%) and malignant melanoma (6.7%).

In the present study, head and neck is the commonest site of SCC, whereas extremities are the commonest site of SCC in the other studies.

In the present study the incidence of basal cell carcinoma is 30%. The incidence of BCC in other studies ranged from 12% (Chakravorthy RC et al) to 28% (Solanki RL et a)l[6]

In the present study majority of cases (82%) are seen on head and neck which is consistent with the findings of Sonam Shaik et al(85%) , Solanki RL et al (94%), Chakravorthy RC et al (90%) and Budharaja SN et al[7](78%).

In the present study male to female ratio is 1.2:1. Solanki RL et al found a male to female ratio of 1.26:1 and in Sonam Shaik et alstudy it is 1.2:1, where as Budharaja SN et alstudy it is2.6:1.

The peak incidence is in 6th decade in the present study.In the study by Sonam Shaik et al the peak incidence is in 8th decade and Solanki et alit is in 5thdecade.

In the present study pigmented type of BCC is the most common type consistent with the study of Sonam Shaik et al study.

Seborrhoeic keratosis: Three cases of seborrhoeic keratosis are seen accounting to 5.8%.Microscopically it shows hyperplastic stratified squamous epithelium with predominance of basal layer with multiple keratin filled cysts.[8]

We could not any study to compare the incidence.

Appendageal neoplasms:

There are13 cases of appendageal tumours out of which 10 are benign and three are malignant.

Pilomatricoma: Among 10 cases of benign adnexal lesions, pilomatricoma represents 30% (3cases) in the present study. In Solanki RL et al.study it is 68.18% and in Reddy et al[9] study it is 69%.

Hidradenoma: In the present study, hidradenoma constitute 50% (3cases) among six benign sweat gland lesions. In Solanki RL et al. study it is 27.6%, in Reddy et al.study it is 67.4% and in Nair SP et al.[10]

study it is 5.3%.

Syringocystadenoma papilliferum: Two cases are seen among six benign adnexal lesions in the present study accounting for 33%. Solanki RL et al reported 11 cases(23.4%), Reddy et al reported three cases (7%) and Nair SP et al reported one case (5.3%).

Hidrocystoma: In the present study one case (17%) is reported among six benign adnexal lesions.

Sebaceous adenoma: one case of sebaceous adenoma noted among 10 benign adnexal lesions in a 57 years female near the outer canthus of left eye.

Sebaceous carcinoma: In the present study three cases of sebaceous carcinoma noted and it is the only malignant lesion of the adnexa. In Reddy et al study 15 cases are noted.

Neoplastic lesions of Melanocytic system:

Benign melanocytic nevus : In this study two cases are seen;one case of intradermal naevus and the other is compound naevus. Both cases are seen in head and neck region and in the age group of 50-60years. Shoko M et al[11] has analyzed 531 cases of nevus out of which 15 were junctional, 134 cases are compound, and 382 cases are dermal.

Malignant Melanoma:

In the present study two cases (6%) of malignant melanoma are reported. In Chakravorthy and Dutta et al study it is 8.69%, Deo SV et al it is 26.1% whereas in Budharaja et al it is 29.4%.

In the present study two cases of malignant melanoma are seen in females, whereas male preponderance is seen in studies done by Sampat and Sirsut et al [12](71%)and Mukhopadhyay s et al[3](82%).

In the present study both cases of malignant melanoma are located over extremities, similar to studies done by Sampat and Sirsut et al (82%) and Mukhopadhyay et al(80%)

CONCLUSION

According to the present study , malignant lesions are common in famales and most common malignancy is squamous cell carcinoma. But as there are only 36 case of malignancy, further studies are required on a large number of cases.

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