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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/10076

DOI URL: <http://dx.doi.org/10.21474/IJAR01/10076>



RESEARCH ARTICLE

A ONE YEAR RETROSPECTIVE STUDY OF HISTOPATHOLOGICAL LESIONS OF HEAD AND NECK.

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Manuscript Info

Manuscript History

Received: 12 September 2019

Final Accepted: 14 October 2019

Published: November 2019

Keywords:

Head, neck lesion.

Abstract

Introduction: Head and neck lesions are commonly encountered in patients of all age group including skin, soft tissue, thyroid, lymph node, salivary gland, eye, nose, oral, otologic, etc., include a spectrum of lesions ranging from simple benign to highly malignant, contribute to significant morbidity and mortality.

Aims & Objective: To determine histopathological subtypes, frequency of head & neck lesion, age, gender distribution and site & organ wise distribution

Methodology: A one year retrospective study was designed to study of various biopsies from head and neck region, sent for HPE at department of pathology, SSMC, Rewa, M.P. from 1st Nov 2018 to 31st Oct 2019

Result: Total 186 cases from the head and neck region were analyzed. Age range was 4 years to 89 years. With maximum cases were in the age group of 11-30 years (60.2%). M:F ratio was 1.16:1. In our study, 55.9% benign, 33.3% inflammatory, 6.5% malignant lesion. Squamous cell carcinoma was the most common malignant lesion

Conclusion: We conclude that site specific data like this is helpful in evaluating patterns of head and neck lesions and augment the baseline data of institute and region.

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Introduction:-

Head and Neck lesion are very common in day to day practice. These lesions can be seen in all the age groups. (1) This region encompass a multitude of inflammatory or neoplastic lesions. Various anatomic sites include oral, upper aero-digestive tract, otologic, thyroid, salivary glands, lymph node, skin & soft tissues. (2,3) Head & neck neoplasia are the 7th most common malignancy worldwide, accounting for 23% of all cancer in males and 6% in females. (4,5) The present study is aimed to review the histological patterns of biopsied head & neck lesions as information regarding the types & frequencies of lesion, age, sex, site wise & involved organ wise distribution of lesions.

Material And Method:-

The study was conducted in the dept. of pathology, SSMC, SGMH, Rewa. This retrospective study was done in the duration of one year from 1st Nov. 2018 to 31st Oct 2019. All histopathological data of head and neck lesions, maintained in the histopathology section were retrieved and reviewed. All the formalin fixed specimen were

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received, after grossing, processing was done, prepared slides were stained with H& E stain and after slide analysis by microscopy histopathological diagnosis were established.

Results:-

A total of 186 cases from the head & neck region were analyzed. The patients' ages ranged from 4 years to 89 years. More than half of the lesions (60.2%) were noted in the age group of 11 to 40 years. There were 100 male & 86 female, ratio was 1.16:1.

Table 1:-Age Wise Distribution of lesion:-

Age group (In years)	No. of Cases	% Of Cases
0-10	6	3.2%
11-20	43	23.11%
21-30	45	24.19%
31-40	24	12.9%
41-50	26	13.9%
51-60	19	10.21%
61-70	16	8.60%
71-80	05	2.68%
81-90	02	1.07%

Table 2:-Distribution of lesions according to topography:-

Site of Involvement	No. of cases	% of cases
Skin & Soft tissue	81	43.50%
Oral cavity	36	19.60%
Lymph node	06	3.20%
Thyroid	12	6.40%
Salivary gland	17	9.13%
Orbit	13	6.90%
Nasal cavity	16	8.60%
Otologic	03	1.60%
Oesophagus	02	1.07%

Table 3:-Distribution of lesions according to histological types:-

Type of Lesion	No. of cases	% of cases
Benign	102	54.9%
Inflammatory	63	33.8%
Malignant	13	6.9%
Pre malignant(dysplasia)	08	4.4%
Total	186	100%

Of all Benign lesion epidermoid cyst (50.9%) was common followed by lipoma(11.7%). Other benign lesion were nodular goiter(8.82%) Epidermoid cyst(50.9%) Mucocele(6.8%),Hemangioma(6.8%)Pleomorphicadenoma(3.9%) squamouspapilloma(2.9%) Follicular adenoma(1.96%) Invertrdpapilloma(0.9%),fibroma(0.9%),chondroidsyringoma(0.9%) hurthlecell adenoma(0.9%),Nasopharyngeal angiofibroma(0.9%).

In inflammatory lesion Nasal polyp(22.2%) was predominant followed by Non specific inflammatory lesion(19.04%). Other inflammatory lesion were Chronic tonsillitis(14.2%) Pterygium(9.5%) Chronic sialadenitis(6.3%) Granulomatous lymphadenitis(6.3%) Chronic dacryocystitis(4.7%) Infected conjunctival cyst(4.7%), CSOM(4.7%) Acute suppurative lymphadenitis(3.17%).

Most common malignant lesion was squamous cell carcinoma(69.2%) involving oral cavity in all cases. Other malignant lesion were Adenoid cystic carcinoma(7.6%), Basal cell carcinoma(7.6%), Salivary duct carcinoma(7.6% and Malignant melanoma(7.6%).

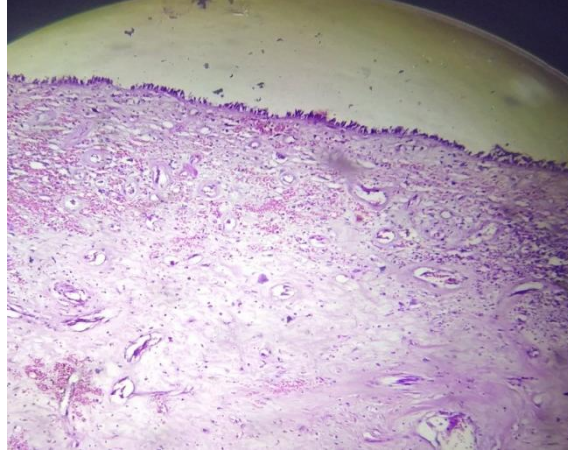


Fig 1:-Nasal Polyp, showing Pseudostratified ciliated columnar epithelial lining and inflammatory infiltrate & oedematous stroma (H& E stain)

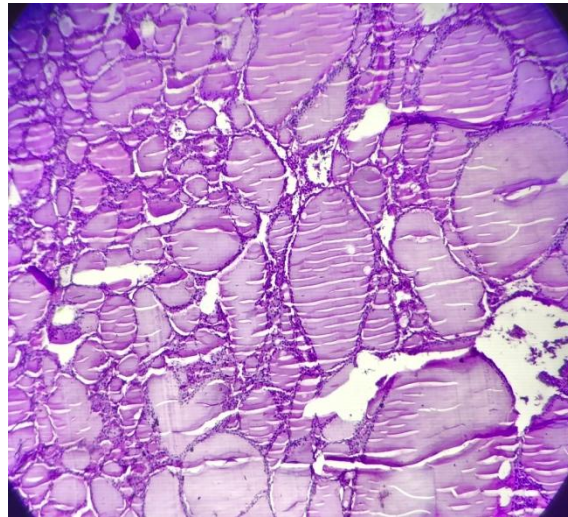


Fig 2:-Colloid goiter, Showing variable sized follicle lined by flattened epithelium and filled with colloid.(H& E)

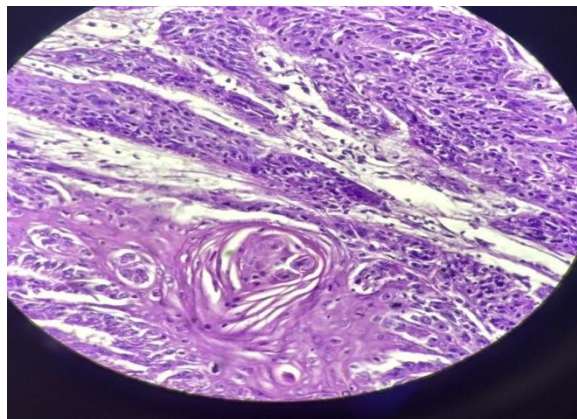


Fig. 3:-Squamous cell carcinoma, Showing sheets of dysplastic squamous epithelial cells with keratin pearls.(H&E)

Discussion:-

In the present study, There was male preponderance with M:F ratio was 1.16:1. Similar Observation was noted in the Sharma M et al(6) study showing M:F ratio was 1.37:1 and Singhal U et al(7) study with M:F ratio 2.5:1. Lesions arising from the skin and soft tissues were found to be maximum(43.50%), compatible with Sharma M et al

study(29.65%). In a study by Kanu OO et al(3) and Popat V et al(8) more number of benign cases were reported which was compatible with our study. The most common benign lesion was epidermoid cyst(50.9%), similar with the Singhal U et al study(7). In the present study, the general topography indicated that oral cavity was most commonly affected by squamous cell carcinoma. Squamous cell carcinoma was the most frequently encountered malignancy in Sharma M et al study(6), Compatible with our study. This could be attributed to major preventable risk factors which are tobacco use, betel quid chewing and alcohol consumption.

Out of the total cases, 6.40% of the cases of thyroid gland found in our study, Among these, most frequent entity was colloid goiter, similar findings were reported by Popat V et al(8), Urooj et al(9) and Rahman MA et al(10) in their respective studies.

Conclusion:-

Through our study we conclude that biopsy remains the gold standard for the diagnosis of head & neck lesion. The present study highlighted the whole spectrum of lesions from head & neck regions. Though head & neck malignancies are a serious issue, good awareness, education and early diagnosis can reduce their incidence

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