Section: Pathology

Original Research Article

HEAD AND NECK LESIONS: A CLINICOPATHOLOGICAL AND HISTOPATHOLOGICAL STUDY

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ABSTRACT

Background: The Pathology of the head and neck includes the eyes, ears, upper aerodigestive tract, salivary glands, dental apparatus, thyroid and parathyroid glands, along with all epithelial, fibrous, fatty, muscular, vascular, lymphoid, cartilaginous, osseous and neural tissues or structures associated with them.
Objectives: The current study aims to categorize non-neoplastic and neoplastic lesions, examine clinical and histopathological findings and observe the frequency, age, gender and anatomical site-wise distribution of head and neck lesions.
Materials and Methods: This is a descriptive study, where we collected clinical profiles from 270 individuals and linked them with gross and histological findings. For the histopathological study, samples were collected, processed to form paraffin embedded sections and stained with H and E stains.
Results: Head and neck lesions contribute only 6.46% among all histopathological lesions. Non neoplastic lesions 61.1% outnumbered neoplastic lesions 38.9%, whereas amongst neoplastic, benign contributed 44.8% and malignant contributed 55.2%. The majority of those affected were in their third and fourth decades of life; females (159) exceed males (111), and the most prevalent manifestation is swelling (70%). The most frequent location was the thyroid (37.8%), followed by the salivary gland (10.7%) and lymph nodes (10.7%).
Conclusion: Head and neck lesions contribute very small percentage among all histopathological lesions. Non neoplastic lesions outnumbered neoplastic lesions whereas amongst neoplastic, malignant tumors outnumber benign tumors. Most commonly affected people were in their third and fourth decades of life. Females outweigh males and swelling is the most prevalent appearance.
Keywords: Head and neck lesions, Histopathological.

INTRODUCTION

The term "Pathology of the head and neck" refers to the broad spectrum of illnesses found in the intricate anatomical area that extends from the upper margins of the sternal manubrium, clavicles and first ribs distally to the frontal sinuses, orbits, roof of the sphenoidal sinuses and clivus proximally. The eyes, ears, upper aerodigestive tract, salivary glands, dental apparatus, thyroid and parathyroid glands, and all associated epithelial, fibrous, fatty, muscular, vascular, lymphoid, cartilaginous, osseous and neural tissues or structures are included in this.[1]

Malignant neoplasms that develop in various head and neck anatomical sites, including the oral cavity, ear, scalp, nasal cavities, paranasal sinuses, nasopharynx, hypopharynx, oropharynx and salivary glands, are the most significant of these.[2]

The right diagnosis strategy for such lesions is crucial because many patients initially seek medical attention after discovering a lump in their neck. Until a clear etiology is found, such tumors should always be regarded as extremely serious.[3]

The current study aims to observe the frequency, age, and gender, anatomical site wise distribution of head and neck lesions, to study clinical and histopathological findings, and to classify non-neoplastic and neoplastic head and neck lesions,

thereby addressing existing data gaps and improving understanding of their impact in Indian healthcare context.

MATERIALS AND METHODS

This is a descriptive study conducted in the Department of Pathology at Government Medical College and Hospital over a period of two and half years (Prospective), after obtaining clearance from institutional ethics committee. 270 cases belonging to head neck region, diagnosed clinically and histopathologically.

Inclusion Criteria

Lesions in the head and neck region were selected based on clinical history, examination results and diagnosis. They underwent biopsy or curative surgery and followed by detailed gross and histopathological examinations. The study comprised head and neck lesions classified into the following nine groups; 1. Thyroid, 2. Salivary glands, 3. Lymph nodes ,4. Nasopharynx, nose, and paranasal sinuses, 5. Oral cavity and oropharynx, 6. The larynx, hypopharynx, 7. Ears, 8. Eyes, 9. Skin and soft tissues.

Exclusion Criteria

Patients who were treated conservatively or patients referred to other hospitals were excluded from this study.

We gathered the patients' clinical profiles for this study based on their age, gender, anatomical location, clinical diagnosis, pertinent investigation and histopathological characteristics. The specimens were received in 10% formalin as a fixative. After fixation , gross findings such as size, shape, color and consistency were noted. Next, representative areas were cut into portions that were 1 x 1.5 cm and 4 mm thick. Filter paper was used to wrap very small biopsy specimens. In a few instances, pictures of the gross specimen were taken. After that tissue were embedded into paraffin blocks, cut on tissue microtome and stained with H and E stains. Light microscopy was used to examine the sections. Correlation of gross and histopathological examination will be carried out. Special staining like immunohistochemistry was done wherever necessary.

All neoplastic lesions were classified according to World health organization (WHO) classification of respective group of lesions except the tumors of eye which were classified according to Rosai and Ackerman's Surgical Pathology. Non neoplastic lesions were noted from standard text books like Sternberg's Diagnostic Surgical Pathology and Rosai and Ackerman's Surgical Pathology.

An attempt was made to connect clinical presentation with histopathological diagnosis. As the study design was descriptive, statistical analysis was conducted using statistical tests such as mean, range, percentage, standard deviation, ANOVA and Chi-square test.

RESULTS

The present study includes a total of 270 head and neck lesions during study period of two and half years. Out of total 4174 cases, 270 cases belonged to head and neck region contributed 6.46%.

Of total 270 cases, 165 (61.1%) were non neoplastic and 105 (38.9%) were neoplastic. Of total 105 neoplastic cases, 47 (44.8%) were benign and 58 (55.2%) were malignant.

Maximum numbers of cases were in the age group 21-40 years [130 cases (48.1%)], followed by 41-60 [57 cases (21.1%)], 0-20 [45 cases (16.7%)] and minimum numbers of cases were in age group > 60 years [38 cases (14.1%)].

Non neoplastic lesions of head and neck occurred in all age groups with peak distribution in the age group of 21-40 years [88 cases (53.3%)]. The youngest patient was 5 years old while the oldest was 65 years of age. Mean age was 32.9 years. Benign tumors occurred in all age groups with peak distribution in the age group of 21-40 years [26 cases (55.3%]. The youngest patient was 10 years old while oldest was 75 years old. Mean age was 37.6 years. Malignant lesions occurred in all age groups, most commonly in age group of 41-60 years [20 cases (34.5%)]. 58.6% of cases were above 40 years. The mean age was 51.2 years.

Out of 270 cases, females (159 cases) outnumbered males (111 cases), contributing 58.9% and 41.1% respectively. The M:F ratio for occurrence of non-neoplastic, benign, malignant lesions were 1:1.5, 1:2.6, 1.3:1 respectively.

Table 1: Comparison of age and gender among lesion categories

Variable	Non-neoplastic (n=165)	Benign (n=47)	Malignant (n=58)	Test statistic	p value
Male, n (%)	65 (39.4)	13 (27.7)	33 (56.9)	$\chi^2 = 13.13$	0.001
Female, n (%)	100 (60.6)	34 (72.3)	25 (43.1)		
M:F ratio	1:1.5	1:2.6	1.3:1		
Mean age (years)	32.9 ± 3.4	37.6 ± 5.4	51.2 ± 7.3	F = 133.7	<0.001

Footnote: Age compared using one-way **ANOVA**; gender compared using **Chi-square test**.

Age and gender distribution differed significantly across lesion categories. Female predominance was observed overall; however, malignant lesions showed a relatively higher proportion of males compared with non-neoplastic and benign lesions ($\chi^2 = 13.13$, p = 0.001). Mean age increased progressively from non-neoplastic lesions (32.9 ± 3.4 years) to benign (37.6 ± 5.4 years) and malignant lesions (51.2 ± 7.3 years), with the difference being statistically significant

(ANOVA F = 133.7, p < 0.001), suggesting that malignant lesions occurred at relatively older ages.

In the present study the commonest complaint was swelling, which was present in 189 cases (70%), followed by nasal obstruction in 28 cases (10.4%) and ulcerous growth in 19 (7%) cases. Duration of complaint was between 1 months -1 year in 62.2% of cases, 1-3 years in 27.5% of cases, and >3 years in 8.1% of cases. 2.2% of the cases had very short duration of <1 month.

Table 2: Distribution of head and neck lesions according to site

SN	Site of lesion	Frequency (No of cases)	Percentage (%)
1	Thyroid	102	37.8
2	Salivary glands	29	10.7
3	Lymph nodes	29	10.7
4	Nose, paranasal sinuses and nasopharynx	28	10.4
5	Oral cavity and oropharynx	26	9.6
6	Hypopharynx and larynx	7	2.6
7	Ear	18	6.7
8	Eye	10	3.7
9	Skin and soft tissue	21	7.8
	Total	270	100

Frequency of head and neck lesions was maximum in thyroid region [102 cases (37.8%)], followed by Salivary glands, lymph node and minimum in hypopharynx and larynx region [7 cases (2.6%)].

Thyroid

Among the 102 cases analysed, 75 were classified as non-neoplastic, 15 as benign, and 12 as malignant. The predominant non-neoplastic lesion identified was colloid goitre, accounting for 23 cases, while follicular adenoma was the most frequently observed benign lesion with 14 cases. Papillary carcinoma emerged as the most common malignant lesion, with 9 cases documented. In these instances of papillary carcinoma, the tumor tissue exhibited a range of gross characteristics from solid to cystic, firm, grey – white and showing clear signs of invasion into the surrounding normal tissue, along with typical microscopic features. [Figure 1]

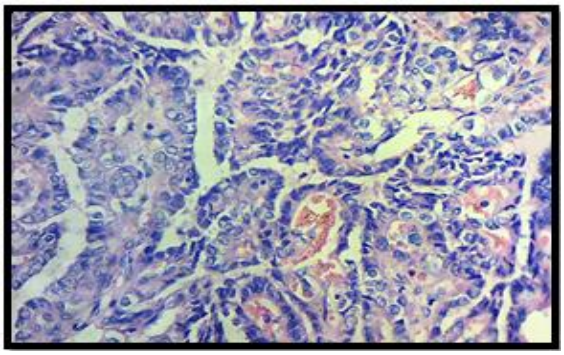

Figure 1: Papillary carcinoma of thyroid - Photomicrograph showing branching papillae with fibrovascular core lined by single layer of cuboidal cells having Orphan Annie nuclei. (H & E: 40x)

Salivary gland

Out of 29 cases examined, 12 were non neoplastic, 12 were benign, 05 were malignant. The most common non neoplastic lesion was chronic sialoadenitis (9 cases), the most common benign lesion was pleomorphic adenoma (06 cases) and the commonest malignant lesion was adenoid cystic carcinoma (02 cases). Gross of adenoid cystic carcinoma varied from solid to firm, poorly circumscribed, infiltrative mass of grey white colour with cystic areas with characteristic microscopic features. [Figure 2]

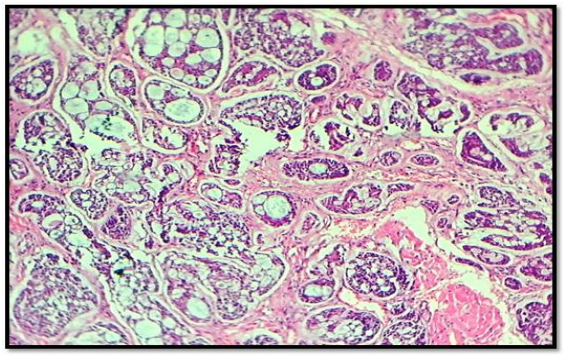

Figure 2: Adenoid cystic carcinoma of salivary gland – Photomicrograph showing typical cribriform pattern of tumor cells arrangement. (H & E: 10x)

Lymph nodes

Out of 29 cases examined, 23 were non neoplastic and 06 were malignant. The most common non neoplastic lesion was TB lymphadenitis (23 cases) and the most common malignant lesion was metastasis to lymph node (05 cases). One rare case of plasmacytoma encountered with gross of lymph node of size 4x3x2 cm, solid, firm, brownish with areas of haemorrhage with typical microscopic features. (Fig. 3) and IHC was positive with CD138 , cytoplasmic lambda and negative with CK 20.(Fig 4 a & b).

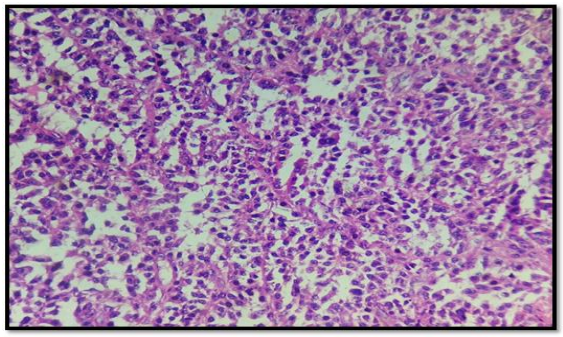

Figure 3: Plasmacytoma- Photomicrograph showing population of plasmacytoid tumor cells with eccentric nuclei and cart wheel pattern of nuclear chromatin with moderate eosinophilic cytoplasm. (H & E: 40x)

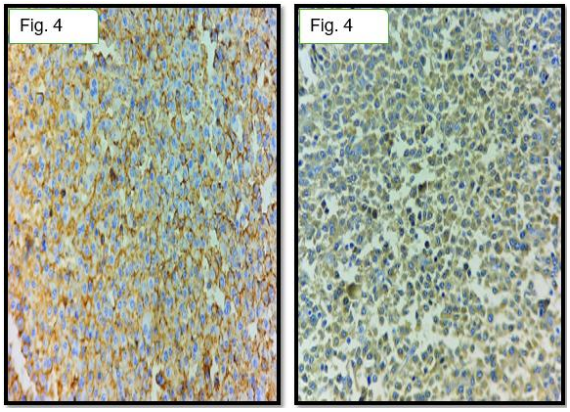

Figure 4 (a): Photomicrograph showing strong and diffuse cell membrane immunoreactivity to CD 138 antigen (IHC: 40x) and Figure 4 (b): Photomicrograph showing strong immunoreactivity for cytoplasmic lambda chain. (IHC: 40x)

Nose, paranasal sinuses and nasopharynx

Out of 28 cases examined, 20 were non neoplastic, 1 benign, 07 were malignant. The most common non neoplastic lesion was inflammatory polyp (11 cases), the single benign lesion was papilloma and the commonest malignant lesion was squamous cell carcinoma (05 cases). 3 examples of rhinosporidiosis with gross varied from pedunculated to sessile mass, red to pink friable appearance and typical microscopic features. [Figure 5]

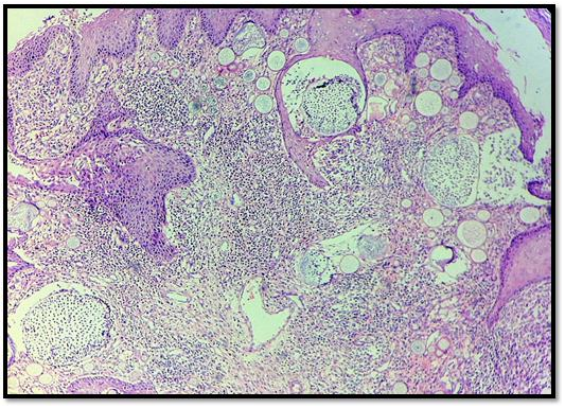

Figure 5: Rhinosporidiosis – Photomicrograph showing multiple thick walled sporangia containing numerous spores. (H & E: 10x)

Oral cavity and oropharynx

Out of the 26 cases studied, 13 were non-neoplastic, three were benign, and ten were malignant. The most common non-neoplastic lesion was follicular tonsillitis, followed by mild dysplasia (each 3 cases). The most common benign lesion was papilloma and the most common malignant lesion was squamous cell carcinoma (10 cases).

Skin and soft tissue

Among the 21 cases reviewed, there was one non-neoplastic case of a branchial cyst. Out of the remaining cases, 15 were classified as benign, which included 5 instances of lipoma, along with one case each of desmoplastic trichoepithelioma, keratoacanthoma, pilomatricoma, seborrheic keratosis, syringocystadenoma papilliferum, trichilemmoma, verruca vulgaris, capillary hemangioma, schwannoma, and neurofibroma. Five cases were identified as malignant, with squamous cell carcinoma being the most common.

The typical microscopic histological features of Syryngocystadenoma papilliferum [Figure 6] and tricholemmoma [Figure 7] were encountered in our investigation.

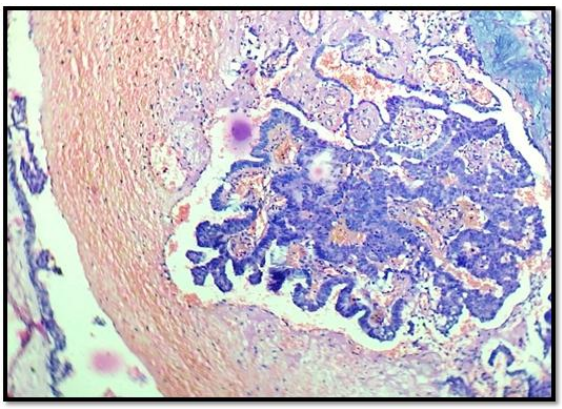

Figure 6: Syringocystadenoma papilliferum – Photomicrograph showing fibrocollagenous cyst wall and glandular papillary proliferations. (H & E: 10x)

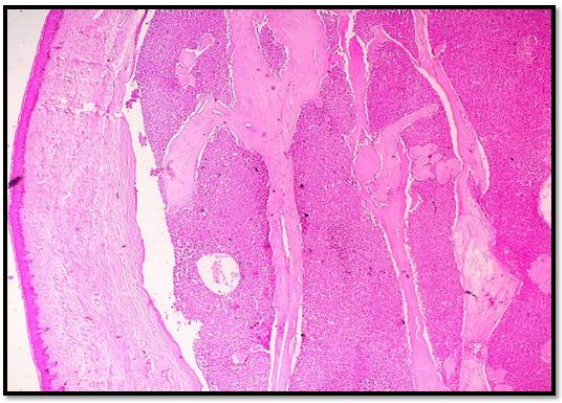

Figure 7: Trichilemmoma – Photomicrograph showing tumor forming glycogen rich clear cells arranged in lobules (H & E: 10x)

Eye, Ear, Hypopharynx and larynx

There were, 2 conjunctival cysts, 1 chalazion, one benign papilloma, 3 squamous cell carcinomas,1 BCC, and 1 retinoblastoma were found in the eye. 15 cholesteatoma, 1 keloid and 1 squamous cell carcinoma case found in the ear.1 non-neoplastic vocal cord polyp and 06 squamous cell carcinomas cases were found in the hypopharynx.

DISCUSSION

Swelling in the head and neck area has considerable implications due to the complex anatomy and the physiological importance of the underlying structures. The presence of various structures in the neck results in different origins of the swelling, with each case displaying a distinct pathology and

prognosis.[4] The anatomical location of the swelling offers essential insights into its etiology and classification, thus aiding in the attainment of a clinical diagnosis associated with them.[5]

Total 270 head and neck lesions were studied. They formed 6.46% of all other lesions. Of this 165 cases were non-neoplastic, 47 cases were benign and 58 cases were malignant contributing 61.1%, 17.4% and 21.5% respectively. Study by Popat VC et al,[6] encountered 26 cases (24.3%) of non-neoplastic , 43 cases (42.7%) of benign and 34 cases (33%) of malignant.

The percentage of non-neoplastic lesions in our study was relatively more than that in study by Popat VC et al,[6] and the percentage of benign lesions in study by Popat VC et al,[6] was relatively more than that in our study. Inclusion of non-neoplastic lesions like colloid goitre which constituted the highest percentage (24%) in study by Popat VC et al,[6] under benign category, may have caused this difference.

Table 3: Comparative analysis of age wise distribution of head and neck lesions

	No. of cases (%)			
Study Age (Years)	**Sharma M et al,[7]**	**Popat VC et al,[6]**	**Sharma HB et al,[8]**	**Present study**
0-20	36 (25.5%)	19 (18.6%)	38 (20.5%)	45 (16.7%)
21-40	44 (30.3%)	39 (38.1%)	100 (52.8%)	130 (48.1%)
41-60	41 (27.6%)	26 (24.6%)	42 (22.1%)	57 (21.1%)
> 60	24 (16.6%)	19 (18.7%)	9 (4.6%)	38 (14.1%)
Total	145 (100%)	103 (100%)	189 (100%)	270 (100%)

Age wise distribution of head and neck lesions in our study was comparable with the available data. In present study maximum number of cases observed in age group of 21-40 followed by 41-60 which is comparable with all above studies.

Table 4: Comparative analysis of gender- wise distribution of head and neck lesions

	No. of cases (%)			
Study Gender	**Popat VC et al,[6]**	**Sahni D et al, [4]**	**Khetrapal et al, [9]**	**Present study**
Male	54 (52.4%)	48 (48%)	128 (44%)	111 (41.1%)
Female	49 (47.6%)	52 (52%)	162 (56%)	159 (58.9%)
Total	103 (100%)	100 (100%)	290 (100%)	270 (100%)
M:F	1.01:1	1:1.12	1:1.3	1:1.4

In the present study, females outnumbered males with M:F ratio of 1:1.4. which is consistent with the study conducted by Sahni D et al,[4] and Khetrapal S et al,[9] Males had slight preponderance in a study by Popat VC et al,[6] with M:F ratio of 1.01:1, which can be explained by difference in the sample size.

Table 5: Comparative analysis of distribution of head and neck lesions according to site

		No. of cases (%)			
SN	**Site of lesion**	**Kumar V et al,[10]**	**Sahni D et al, [4]**	**Popat VC et al,[6]**	**Present study**
1	Thyroid	24 (20%)	31 (31%)	32 (31.1%)	102 (37.8%)
2	Salivary glands	12 (10%)	20 (20%)	7 (6.8%)	29 (10.7%)
3	Lymph nodes	28 (23.3%)	39 (39%)	21 (20.4%)	29 (10.7%)
4	Nose, paranasal sinuses and nasopharynx	8 (6.7%)	Miscellaneous (all categories labelled as Misc.) 10 (10%)	-	28 (10.4%)
5	Oral cavity and oropharynx	36 (30%)		-	26 (9.6%)
6	Hypopharynx and larynx	6 (5%)		-	7(2.6%)
7	Ear	-		-	18 (6.7%)
8	Eye	-		-	10 (3.7%)
9	Skin and soft tissue	6 (5%)		15 (15%)	21 (7.8%)
	Total cases	120 (100%)	100 (100%)	103 (100%)	270 (100%)

In our study the most common site of occurrence of head and neck lesions was thyroid (37.8%) which was comparable with study by Popat VC et al,[6] (31.06%), where they classified the lesions of oropharynx, hypopharynx and larynx under throat region (27.8%). Data varies with study by Sahni D et al,[4] where commonest category was lymph node (39%) followed by thyroid (31%). Study Kumar V et al,[10] encountered oral cavity (30%) was commonest category. These variation of data may be due to different demographic conditions and sample size.

The goitre (23 cases) was the commonest lesion of thyroid which is comparable with study by Popat VC et al,[6] (24 cases). the most common benign lesion was follicular adenoma (14 cases) and the most common malignant lesion was papillary carcinoma (9 cases).

In the current study, the most common neoplasm and benign tumor of the salivary glands was pleomorphic adenoma (6 cases) and malignant was adenoid cystic carcinoma (2 cases), which is comparable to the study by Vuhahula EA et al,[11] in which the most common benign was pleomorphic adenoma with 107 cases and

the most common malignant was adenoid cystic carcinoma with 2 cases.

In our study, in the lymph node category, TB lymphadenitis was the most common (19 cases), while secondaries (5 cases) were the most common in malignant, which is consistent with the findings of Bhatt JV et al,[12] who reported 276 cases of TB lymphadenitis as the most common and 34 cases of secondaries as the most common among malignancy.

The most common sinonasal lesion was nasal polyps in 13 cases, which is comparable to the study conducted by Dafale SR et al,[13] with 41 cases and Chavan SS et al,[14] with 106 cases.

The most common malignant tumor of the oral cavity was squamous cell carcinoma, which occurred in 10 cases. According to Misra V et al,[15] who examined sections from 776 oral cavity lesions, squamous cell carcinoma was the most common (57%).

Hemangioma is the most prevalent benign tumor of skin and soft tissue, accounting for 5 cases, whereas squamous cell carcinoma accounts for 5 cases, which is consistent with a study conducted by Ishar T et al,[16] that revealed hemangioma to be the most common benign tumor. Popat VC et al,[6] found that squamous cell carcinoma with 2 cases was the most common malignant tumor.

In the present study the commonest complaint was swelling,189 cases (70%), followed by nasal obstruction in 28 cases (10.4%) and ulcerous growth in 19 (7%) cases. This data is comparable with observations made by Kumar et al,[10] where commonest complaint was swelling in 72 cases (60%) followed by pain in 20 cases (16.8%) and ulcer in 10 cases (8.3%). But, data varies with other study by Puthukudy PA et al,[17] where majority of the patients presented with chief complaints of dysphagia (38.46%), followed by ulcer (23.08%) and neck swelling (17.31%).

CONCLUSION

The study emphasise complete spectrum of clinical and histomorphological pattern of head and neck lesions encountered in teaching hospital. Head and neck lesions contribute very small percentage among all histopathological lesions. Non neoplastic lesions outnumbered neoplastic lesions whereas amongst neoplastic, malignant tumors outnumber benign tumors. 3rd and 4th decade of life is mostly affected by head and neck lesion with mean age for non-neoplastic lesion, benign tumor and malignant tumor is 32.9, 37.6, 51.2 respectively. Females outnumbered male with swelling is the commonest presentation.

Frequency of distribution of head and neck lesions was maximum in thyroid followed by salivary gland, lymph node. Among all non-neoplastic lesions, goiter was the most common histopathological diagnosis followed by tuberculous lymphadenitis, cholesteatoma, inflammatory nasal polyp. Among all benign lesions, follicular adenoma of thyroid gland was the most common histopathological diagnosis followed by pleomorphic adenoma of salivary gland. Among all malignant lesions squamous cell carcinoma at various sites was the most common malignancy observed.

Hematoxylin and eosin stains remain the most effective for first diagnosis. When histological diagnosis is unclear, immunohistochemistry can help with precise lesion categorization.

The current study was conducted to review the recent literature on recognising clinicopathological criteria for head and neck lesions, as well as to link the histomorphological type of head and neck lesion with patient age and gender.

The limitation of this study was that the current data, which was obtained in a hospital, could not be considered indicative of the incidence of these lesions in the general community.

Conflict of interest: Nil

REFERENCES

1. Cardesa A, Slootweg PJ. Pathology of the Head and Neck. New York. Springer Verlag Berlin Heidelberg; 2006.
2. Adeyemi BF, Adekunle LV, Kolude BM, Akang EE, Lawoyin JO. Head and neck cancer a clinicopathological study in a tertiary care center. J Natl Med Assoc. 2008 Jun;100(6):690-7.
3. Freund HR. Principles of Head and Neck Surgery. 2nd ed. New York. Appleton-Century-Crofts; 1979.
4. Sahni D, Kaur A, Bansal A,Chawla S, Bedi N, Sahni P. A prospective study to assess clinicopathological correlation of head and neck masses. Int J Community Med Public Health 2024;11:3107-12.
5. Pulgaonkar R, Chitra P, Moosvi Z. Benign reactive lymphadenopathy associated with submandibular gland enlargement during orthodontic treatment. J Oral Maxillofac Pathol. 2017;21:181-2.
6. Popat VC, Vora D, Shah H. Clinico – Pathological Correlation of Neck Lesions – A Study Of 103 Cases. The Internet Journal of Head and Neck Surgery. 2010; 4 (2).
7. Sharma M, Sharma A, Gandhi S, Khajuria A, Goswami KC. Histopathological patterns of head and neck lesions - a two year retrospective hospital based study. Int J Res Med Sci 2017;5:1282-7.
8. Sharma HB, Kumar N, Bansal M, Gupta M. Spectrum of lesions of head and neck in a medical college of North India. Indian J Pathol Oncol 2021;8(1):87-93.
9. Khetrapal S, Jetley S, Jairajpuri Z, Rana S, Kohli S. FNAC of head and neck lesions and its utility in clinical diagnosis: a study of 290 cases. Nat J Med Res. 2015;5(01):33-8.
10. Kumar V, Kumari R, Kar AG. Histopathological spectrum and clinicopathological correlation of head and neck lesions: a comprehensive study. Int J Pharm Qual Assur. 2025;16(1):418-423.
11. Vuhahula EA. Salivary gland tumors in Uganda: clinical pathological study. Afr Health Sci. 2004 Apr; 4(1):15-23.
12. Bhatt JV, Shah JM, Shah F. Clinico-Pathological Profile of Cervial Lymphadenopathy.
13. Dafale SR, Yenni VV, Bannur HB, Malur PR, Hundgund BR, Patil SY. Histopathological study of polypoidal lesions of the nasal cavity-A cross sectional study. Al Ameen J Med Sci. 2012; 5(4):403-6.
14. Chavan SS, Deshmukh S, Pawar V, Sarvade K, Kirpan V, Kumbhakarna NR, Sonavani M. Case Study of Clinicopathological Correlation of Benign Sinonasal Masses. World Articles In Ear, Nose and Throat. 2012 Apr 10; 5(1).
15. Misra V, Singh PA, Lal N, Agarwal P, Singh M. Changing pattern of oral cavity lesions and personal habits over a decade: hospital based record analysis from allahabad. Indian J Community Med. 2009 Oct; 34(4):321-5.

16. Ishar T, Gupta RK, Khajuria A. Role of FNAC In Diagnosis of Non-Thyroidal Head and Neck Lesions. JK Science. 2012 Jan-Mar; 14(1).

17. Puthukudy PA, Feshan M, Satheesh R. Clinicopathological profile and outcomesof treatment of head and neck cancer patients in a tertiary care center: a hospital-based prospective study. Int J Otorhinolaryngol Head Neck Surg 2023;9:58-64.