



INCIDENCE OF NECK SWELLINGS PRESENTING AT NARAYAN MEDICAL COLLEGE AND HOSPITAL, SASARAM

Surgery

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ABSTRACT

AIM: To find out the incidence of neck swellings in patients presenting to Narayan medical college and hospital, sasaram.

MATERIALS AND METHODS: Study was done over patients complaining of neck swelling in the last one year regardless of the any age group or gender. On the basis of the clinical examination, USG and the FNAC reports of the patient the incidence of various neck swellings were evaluated.

RESULTS: In the study total 60 cases were included. Of all the patients, approx 62 percent patients were females in which two third females had thyroid gland swellings. Age group from 21 to 30 years people were more affected. In our study it was found that among various swellings lymph node swellings was most common and then thyroid swelling.

CONCLUSION: Our study shows that the patients presenting with neck swelling usually were lymphatic swelling. There is need of nationwide public campaigns to help in the proper management of various neck swellings.

KEYWORDS

Neck swelling, USG, FNAC.

INTRODUCTION

In clinical practice neck swellings are frequently encountered in India. It has been proven to be an important cause for significant morbidity and mortality. The neck swelling etiology ranges from congenital or benign lesions to neoplastic or acquired lesions which may also present in late childhood.⁽¹⁻⁵⁾ Various neck swellings are like branchial cyst, thyroglossal cyst, tubercular lymphadenitis, goitre, follicular adenoma, papillary carcinoma of thyroid, lipoma, pleomorphic adenoma, sebaceous cyst etc. In various neoplasms in India neck malignancy forms a significant fraction. In the neck, incidence of all the cancers in males is 23% and 6% for females. The increased prevalence of neck swellings in India can be because of use of viral infections, tobacco in various forms and poor oral dental hygiene⁽⁶⁻⁸⁾ It's a challenge in underdeveloped and developing countries for proper diagnosis of neck swelling. Early diagnosis of neck swellings can help in reducing significant morbidity. Imaging modalities like CT scan, Ultrasonography, MRI can prove to be useful in the effective, non-invasive evaluation of neck swellings. Its relationship to adjacent soft tissue and bony structures can also be assessed.⁽⁹⁻¹¹⁾ But in the last two decades, the evaluation of the various neck swellings by fine needle aspiration cytology (FNAC) has become an important tool because of its diagnostic accuracy and minimal disruptive nature procedure and high degree of cost effectiveness. It has become an important tool for correct diagnosis, not only for neoplastic lesions of the neck but also for inflammatory, infective and degenerative neck lesions as well.^(8,12)

AIMS AND OBJECTIVES

1. To evaluate the incidence of neck swellings in patients presenting at Narayan Medical College and Hospital, Sasaram.
2. To evaluate the incidence of various lymph nodal swellings, salivary glands swelling and types of thyroid swellings.

MATERIALS AND METHODS

This retrospective study was carried out in the department of General Surgery at Narayan Medical College and Hospital, Sasaram for patients presenting with neck swellings in the last one year since October 2020 to September 2021. These patients were evaluated in terms of their final diagnosis based on their clinical examination, ultrasonography and FNAC reports correlation.

Inclusion Criteria

All those patients who presented to the department of General surgery with neck swelling were included in the study regardless of the age group of the patient or gender.

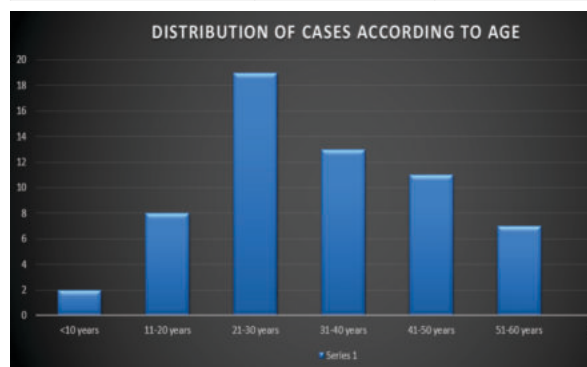
Exclusion Criteria

Those patients who have not given consent for the study.

OBSERVATIONS AND RESULTS

There were 60 cases in this study, those who presented with the complaint of neck swelling within the duration of 1 year (October 2020 to September 2021).

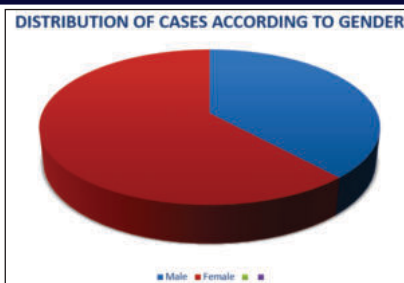
Age groups (in years)	Number of cases	Percentage (%)
<10	2	3.33%
11-20	8	21.66%
21-30	19	31.66%
31-40	13	21.66%
41-50	11	18.33%
51-60	7	11.66%
>60		
Total	60	100%



Most of the people in the study belonged to age group of 21-30 years which was 19 followed by 13 (31-40 years) and 11 (41-50 years) age groups.

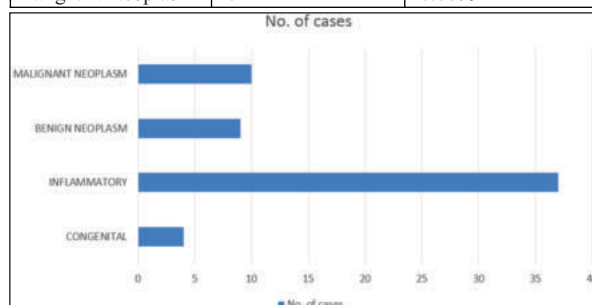
In our study females (61.67%) were more affected than men (38.33%).

Gender	Number of cases	%
Male	23	38.33%
Female	37	61.67%

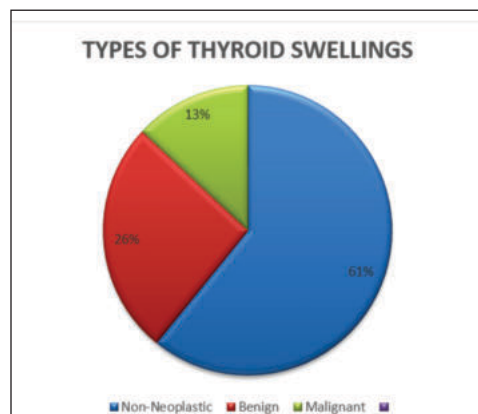


Almost half the cases of all neck swellings turned out to be inflammatory conditions (61.66%) followed by malignant neoplasm (16.66%), benign neoplasm (15%) and congenital (6.66%).

Etiology	Number of cases	%
Congenital	4	6.67%
Inflammatory	37	61.67%
Benign Neoplasm	9	15%
Malignant Neoplasm	10	16.66%

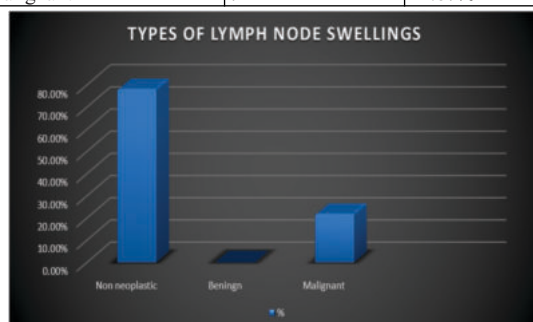


Thyroid Swelling type	Number of cases	%
Non Neoplastic	14	60.87%
Benign	6	26.09%
Malignant	3	13.04%



Most of the thyroid swellings were non neoplastic (60.87%). Rest of the swellings turned out to be benign or malignant neoplasms (39.13%).

Lymph node swelling	Number of cases	%
Non neoplastic	25	78.12%
Benign	0	0%
Malignant	7	21.87%



There were comparatively more non neoplastic (78.12%) than neoplastic lymph node swellings (21.88%). The neoplastic lesions were mostly neck secondaries.

Salivary gland swelling	Number of cases	%
Non neoplastic	1	25%
Benign	3	25%
Malignant	0	0%
Others		
Carotid Body Tumor	1	100%

In salivary gland swellings were and non neoplastic swellings were more than neoplastic.

Most of the neck swellings were lymph node swelling (53.33%) followed by thyroid swellings (38.33%) followed by salivary gland swelling (6.67%) and others (1.67%). The commonest diagnosis was non neoplastic lymph node swelling followed by non neoplastic thyroid swellings.

DISCUSSION

Various neck swellings evaluation can be a challenge for health care providers. The differential diagnosis of neck swellings range from congenital neck swellings to malignancies. For the initial evaluation proper history taking and clinical examination are very important. Due to high diagnostic accuracy FNAC is a helpful tool.

In this study, the diagnostic yield of the FNAC was almost 97%. In the paediatric age group the neck masses are broad and include congenital, inflammatory and neoplastic lesions⁽¹³⁾. In the present study, similar to other reports, most common lesions in the paediatric age group were benign conditions⁽¹⁴⁾. According to one of study, people in third decade of their life are more affected.⁽¹⁵⁾

In our review, about 62% of patients were females while remaining were males. In a similar study⁽¹⁵⁾ about 75% patients with neck swellings were females. In our study, we found that most of the neck swellings were inflammatory conditions. Study by Mohamed MH et al⁽¹⁶⁾ and Cheng AT et al⁽¹⁷⁾ showed that in the developing countries inflammatory and non neoplastic conditions are more common while in the developed countries malignant neck conditions are more common. Among all the neck swellings, most of the swellings seen in our study were lymph node swellings. In our study, most of the cases were having the final diagnosis as colloid goiter in thyroid swelling which is similar to the study done by Savithri et al⁽¹⁸⁾ and others⁽¹⁵⁾. Kumar V et al. also reported that most of the lesions of the thyroid were benign neoplasms⁽¹⁹⁾. In our case series, most of the lymph nodal masses were inflammatory or infectious lesions which is in concordance with the study done by Matsumoto F et al⁽²⁰⁾. However, in one study⁽²¹⁾ showed that most of the lymph nodal masses were neoplastic (mostly lymphoma cases). In a study by Manjula K et al⁽²²⁾ and similar studies^(23,24,25,26), most common diagnosis was tubercular lymphadenitis. In our study there were very few cases of salivary gland swellings. But, most of the salivary gland swellings turned out to be benign conditions similar as Rice DH et al⁽²⁷⁾ and Shishegar M et al⁽²⁸⁾.

FNAC is a safe choice for evaluation of all the neck masses because even if the mass is malignant then also FNAC is considered as much safer than excision biopsy as the chance of the needle seeding of the neoplastic cells while performing the procedure is 0.003-0.009%⁽¹⁶⁾.

CONCLUSION

It can be concluded that most of the people with neck swelling in our study were people having lymph node swelling than thyroid swellings. Of all the lymph node swelling tubercular lymphadenitis is most common and in thyroid swellings, most common was colloid goitre. If properly evaluated and investigated they can be diagnosed and treated on time. It won't be wrong to add that though neck swellings can be a diagnostic puzzle for health care providers.

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