A CLINICO-PATHOLOGICAL STUDY OF NECK SWELLINGS EXCLUDING THYROID
V. Rambabu1, J. Kishore2, N. Dinesh Kumar Reddy3, G. Santhosh Kumar4

HOW TO CITE THIS ARTICLE:

ABSTRACT: Neck swellings are common problems in our clinical practice. Neck swellings may be classified as congenital and acquired. Acquired may be inflammatory, neoplastic or others. In children the common neck swellings are congenital and inflammatory. In adults neoplastic lesions are more important. Tuberculous lymphadenitis is one of the common causes of neck swellings in our Indian population. The study was conducted at government general hospital, Kakinada during the study period July 2014 August 2015. Total 50 patients who presented with neck swellings other than thyroid were included in this study.

KEYWORDS: Neck swellings, Tuberculous lymphadenitis, Nonspecific lymphadenitis, FNAC.

INTRODUCTION: Neck swellings are common problems in our clinical practice. Neck swellings may be classified as congenital and acquired.(1) Acquired may be inflammatory, neoplastic or others. In children the common neck swellings are congenital and inflammatory.(2,3) In adults neoplastic lesions are more important. Tuberculous lymphadenitis is one of the common causes of neck swellings in our Indian population. It has been estimated that 1.5% of Indian population is affected with tuberculosis. Other common causes of neck swellings are secondaries(4) in the neck, acute lymphadenitis, chronic nonspecific lymphadenitis,(5) lymphomas etc. Cystic swellings like cystic hygroma, branchial cyst are seen less frequently.

In our study conducted at government general hospital, Kakinada during July 2014 to August 2015 in which patients with swellings in the neck region were included except thyroid and its associated swellings.

A good working knowledge of anatomy of the neck, detailed clinical history and thorough physical examination, imaging techniques,(6,7) FNAC(8) and excision biopsy helped us to establish the correct diagnosis and appropriate surgical treatment.(9)

AIMS AND OBJECTIVES: To study various etiological factors of neck swellings, clinical presentation and correlation of clinical diagnosis with FNAC(10) and histopathological report.(11)

MATERIALS AND METHODS: The study was conducted at government general hospital, Kakinada during the study period July 2014- August 2015. Total 50 patients who presented with neck swellings other than thyroid were included in this study. After detailed history taking and clinical examination, the patients were subjected to FNAC(10,8,12,13) to confirm diagnosis by histopathological examination.(11)
RESULTS: A total of 50 cases of neck swellings excluding thyroid were studied in patients aged 15 to 75 years, with most patients aged between 20 to 30 years (65%). 28 (56%) were males and 22 (44%) were females (Table-1). In our study the most common cause for neck swellings (Fig. 3) was non-specific lymphadenitis (52%), the second commonest cause was tuberculous lymphadenitis (24%), the third common cause was secondaries (8%). The remaining were lymphomas (6%), thyroglossal cysts (4%), lymphatic cysts (4%) and branchial cysts (Fig. 1) (2%). FNAC\(^{14,10,12,13,15}\) was able to diagnose granulomatous lymphadenitis in 24% of patients, lymphoma in 8%, metastatic deposits (Fig. 5) in 8%, non-specific lymphadenitis (Fig. 4)\(^5\) in 52%, thyroglossal cyst in 4%, lymphatic cyst (Fig. 2) in 4% of the patients (table-2). Histopathological examination\(^{15,10}\) revealed tuberculosis in 27%, non-specific lymphadenitis in 31%, lymphoma in 13%, thyroglossal cyst in 9%, metastatic carcinoma\(^4\) in 4%, lipoma in 4% of cases.

<table>
<thead>
<tr>
<th>Sex</th>
<th>No. of Cases</th>
</tr>
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<tbody>
<tr>
<td>Male</td>
<td>28</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 1: Sex distribution of neck swellings

![Fig. 1: Branchial Cyst](image1)

![Fig. 2: Lymphatic Cyst](image2)

![Fig. 3: Bar diagram showing incidence of neck swellings](image3)
Table 2: FNAC of neck swellings

<table>
<thead>
<tr>
<th>FNAC</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Nonspecific lymphadenitis</td>
<td>52</td>
</tr>
<tr>
<td>TB lymphadenitis</td>
<td>24</td>
</tr>
<tr>
<td>Secondaries</td>
<td>8</td>
</tr>
<tr>
<td>Lymphomas</td>
<td>8</td>
</tr>
<tr>
<td>Thyroglossal cyst</td>
<td>4</td>
</tr>
<tr>
<td>Lymphatic cyst</td>
<td>4</td>
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</tbody>
</table>

**DISCUSSION:** Neck swellings are now a days a challenging proposition for any surgeon. The neck swellings are commonly found presentation of patients in clinical practice. In our study, the commonest neck swellings were non-specific lymphadenitis,\(^5\) TB lymphadenitis, secondaries etc. the final diagnosis was made based on clinical findings, USG neck, FNAC.\(^{9,15,10,12,13}\) In our study male to female ratio of neck swellings was 28:22(1.27:1). Incidence of non-specific lymphadenitis was 26cases (52%), TB lymphadenitis 12 cases (24%), secondaries\(^4\) 4cases (8%), lymphomas 3cases (6%), thyroglossal cysts 2cases (4%), lymphatic cysts 2cases(4%), branchial cysts 1 case (2%). The male to female ratio of non-specific lymphadenitis 1.2:1 showing male predominance. ultrasound examination of the neck was done in all cases. Fine needle aspiration cytology is a well-established diagnostic tool in assessment of cervical masses.\(^{11}\)

**CONCLUSION:** Non–specific lymphadenitis was the first common cause of cervical lymphadenopathy followed by Tubercular cervical lymphadenitis. Most of the cases studied were belonged to lower socio-economic group. If standards of living improved the incidence of Non–specific lymphadenitis and Tuberculosis may come down. FNAC\(^{10,8,12,13}\) is an easy and suitable tool for the assessment of patients with neck swellings. The surgery played a key role in other benign neck swellings like thyroglossal cysts, Lymphatic cysts, and Branchial cysts.

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