



## AN AUDIT OF 200 CASES OF CERVICAL LYMPHADENOPATHY

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### ABSTRACT

**OBJECTIVE:** To find out the frequency of different diseases involving the cervical lymph nodes.  
**STUDY DESIGN & DURATION:** Descriptive prospective study conducted from June 2006 to July 2009.

**PATIENT & METHODS:** Total 200 patients were included in this study. FNAC was performed in all cases, while, incisional/excisional biopsy performed in cases where FNAC was inconclusive. This study was conducted at surgical unit-II Chandka Medical College Hospital Larkana.

**INCLUSION & EXCLUSION CRITERIA:** Patients having cervical lymphadenopathy for > 3 weeks were included & patients below 10 years of age were excluded from this study.

**RESULTS:** The most common cause of cervical lymphadenopathy was tuberculosis in 99 (49.5%) patients out of 200. 2<sup>nd</sup> most common cause was reactive change which accounts about 36 cases (18%). Chronic nonspecific inflammation 24 cases (12%), non hodgkins lymphoma 16 cases (8%), metastatic carcinoma 14 cases (7%), hodgkins lymphoma 10 cases (5%) & kikuchis lymphadenopathy in 1 case (0.5%).

**CONCLUSION:** Tuberculous cervical lymphadenopathy is a frequent disease in our society. Therefore it is important that a high index of suspicion for tubercular lymphadenopathy is required. Early diagnosis & treatment will cure the disease; prevent cold abscess & sinus formation.

**KEY WORDS:** Cervical lymphadenopathy, tuberculosis, reactive change, FNAC, incisional biopsy.

### INTRODUCTION

Lymphatic system is one of the important defense systems of body. Interstitial fluid is drained through the lymphatics. Lymph nodes which act as filters are scattered through out the body. Cervical lymph nodes which drain the head, neck and part of chest are exposed lymph nodes of the body.

Cervical lymphadenopathy is common in child hood.<sup>1</sup> Variety of diseases cause enlargement of lymph nodes. However majority of the patients with neck lumps have benign reactive lymphadenopathy.<sup>2</sup> Differential diagnosis of cervical lymphadenopathy is so vast that a focus is essential. Lymphadenopathy can involve different age groups and any site of the body.<sup>3,4</sup> Cervical lymph nodes may get enlarged due to different diseases, like tuberculosis, lymphoma, metastatic focus of malignant lesions, sarcoidosis & other viral & bacterial infections of head, neck, throat & face.

Tubercular lymphadenopathy is the most common extra pulmonary form of tuberculosis & cervical lymph nodes are the most commonly affected group of nodes.<sup>5,6</sup>

### PATIENTS & METHODS

A total of 200 patients suffering from cervical lymphadenopathy for more than three weeks period were included in this study. The age ranged This study was conducted at surgical unit-II Chandka Medical College Hospital Larkana from June 2006 to July 2009. A total of 200 patients suffering from cervical lymphadenopathy for more than three weeks period were included in this study. The age ranged between 10 to 70 years. Clinical assessment was done as OPD & indoor case. History & clinical findings were written in a preformed proforma. All the patients were sent to ENT specialist for ENT examination. Following investigations were carried out.

1. Blood CP&ESR
2. X-ray chest

3. FNAC
4. Incisional / Excisional biopsy
5. Sputum for AFB

Open biopsy was done in those cases where FNAC was inconclusive. Patients diagnosed as reactive lymphadenopathy were treated with antibiotics and those diagnosed as tuberculosis lymphadenopathy were kept on anti tuberculosis chemotherapy. Those who had metastatic lymphadenopathy were referred back to ENT consultant again to hunt for primary focus. Those patients who had lymphoma were sent to Larkana institute of nuclear medicine & radiotherapy (LINAR) for management.

The data analysis was done on SPSS 13 version.

### RESULTS

Out of 200 cases x-ray chest was suggestive of pulmonary tuberculosis only in 21 (10.5%) patients. ESR was above 50 mm/1<sup>st</sup> hour in 80 patients. Total leucocyte count was raised in 70 (35%) patients only. Sputum for AFB was +ve in 12 (57.14%) patients out of 21, who were suffering from pulmonary tuberculosis along with cervical lymphadenopathy. Age of the patients ranged between 10 – 70 years. Mean age was 35.16 ± SD 16.56 years. Out of 200 cases 150 patients have involvement of posterior group of cervical lymph nodes, submandibular lymph nodes were the 2<sup>nd</sup> most common affected site in the neck. In majority of cases there was unilateral cervical lymph node involvement. Male were slightly predominantly affected. Their number was 111 (55.5%) in comparisons to females who were 90 (44.5%). Male to female ratio was 1:0.8. FNAC was performed in all cases but was inconclusive in 150. So these patients were subjected to incisional & excisional biopsy. The most common cause of cervical lymphadenopathy was tuberculosis in 99 (49.5%) patients out of 200. 2<sup>nd</sup> most common cause was reactive change which accounts about 36 cases (18%). Chronic nonspecific inflammation 24 cases (12%), non hodgkin's lymphoma 16 cases (8%), metastatic carcinoma 14 cases (7%), hodgkin's lymphoma 10 cases (5%) & kikuchi's lymphadenopathy in 1 case (0.5%). Analysis of Data in SPSS (ver: 13.00)

### DISCUSSION

Tuberculosis is one of the biggest health challenges the world is facing.<sup>7</sup> In this study 55% cases suffering from cervical lymphadenopathy were males & 45% were females, which is closely related to a study conducted by Faisal Ghani Siddiqui & Qamar Ahmed in 2002. Their study shows that 52.9% of cases were male & 47.1% were female.<sup>8,9,10</sup> Pandit et al & Bezabih et al in their study also shows that there is obviously no significant sex prepon-

Descriptive					
DESCRIPTIVE STATISTICS					
	N	Minimum	Maximum	Mean	Std. Deviation
Age	200	10	70	35.16	16.466
Valid N (listwise)	200				

### Frequency Table

SEX				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	111	55.5	55.5	55.5
Female	89	44.5	44.5	100.0
Total	200	100.0	100.0	

### DISEASE

	Frequency	Percent	Valid Percent	Cumulative Percent
Tuberculosis	99	49.5	49.5	49.5
Reactive change	36	18.0	18.0	67.5
Chronic non specific inflammation	24	12.0	12.0	79.5
Non Hodgkin's lymphoma	16	8.0	8.0	87.5
Metastatic carcinoma	14	7.0	7.0	94.5
Hodgkin's lymphoma	10	5.0	5.0	99.5
Kikuchi's lymphadenopathy	1	.5	.5	100.0
Total	200	100.0	100.0	

derance. Posterior cervical lymph node involvement was the most common site, followed by submandibular lymph nodes. Study conducted at ENT department, Khat Mandu Medical College also shows that posterior cervical lymph nodes were affected in 42% of cases followed by upper deep cervical 16% & submandibular lymph nodes in 15% of cases.<sup>5</sup> Fine needle aspiration cytology is widely accepted as accurate, sensitive, specific cost effective & minimal invasive procedure in the diagnosis of lymphadenopathy as shown by weiter et al and Jha et al.<sup>11,12</sup> But in our setup FNAC results were inconclusive in 75% of cases which is a large number. Most frequent cause of cervical lymphadenopathy was tuberculosis (49.5%) in this study. Similar high incidence was reported by Dandapat et al 41.5% and Castro et al 46%.<sup>6,13</sup>

### CONCLUSION

Tuberculous cervical lymphadenopathy is a frequent disease in our society. Therefore it is

important that a high index of suspicion for tubercular lymphadenopathy is required. Early diagnosis & treatment will cure the disease; prevent cold abscess & sinus formation.

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