



# EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Research Article ISSN 2394-3211

**EJPMR** 

## SOCIODEMOGRAPHIC STATUS OF CERVICAL LYMPHADENOPATHY PATIENTS

Dr. Md. Mahabur Rahman Sarker\*<sup>1</sup>, Dr. Khorsed Alam<sup>2</sup>, Dr. Moniruzzaman Mollah<sup>3</sup> and Dr. AHM Touhidul Alam<sup>4</sup>

Assistant Professor, Department of Pediatric Surgery, Shaheed Ziaur Rahman Medical College, Bogura, Bangladesh.
Resident, ENT Department, Dhaka Medical College and Hospital, Dhaka, Bangladesh.
Professor of Surgery, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh.

\*Corresponding Author: Dr. Md. Mahabur Rahman Sarker

Assistant Professor, Department of Pediatric Surgery, Shaheed Ziaur Rahman Medical College, Bogura, Bangladesh.

Article Received on 04/03/2020

Article Revised on 25/03/2020

Article Accepted on 15/04/2020

#### **ABSTRACT**

**Objective**: In this study our main goal is to evaluate sociodemographic statusof cervical lymphadenopathy patients. **Method:** This cross-sectional analytical study was done Total 260 patients with cervical lymphadenopathy, persisting for >2 weeks either localized or generalized attending inpatient and outpatient department (particularly surgical, medical, pediatrics, ENT, dermatology) of Dhaka Medical College Hospital, from December 2012 to December 2013. **Result:** during the result, most of the lymph nodes were unilateral, multiple, firm, discrete, mobile and nontender. In case of tuberculosis, these were unilateral, multiple, firm, matted, mobile and nontender, whereas metastatic nodes were unilateral, multiple, hard, discrete, fixed and nontender and most of the lymphomas were bilateral, multiple, firm, discrete, mobile and nontender. Axiliary lymphnode involvement was found in 8.5% cases, abdominal in 6.5% and inguinal in 4.6% cases. **Conclusion:** From our result, we can conclude that, the most common cause of infective enlargement of supraclavicular lymphnode was pulmonary tuberculosis. Further study is needed for better outcome.

**KEYWORDS:** Clinical and aetiological pattern, cervical lymphadenopathy.

## INTRODUCTION

Cervical lymphadenopathy is usually defined ascervical lymph nodal tissue measuring more than 1cm in diameter. This can be presented as isolated oras a part of generalized lymphadenopathy. Enlargedpalpable cervical lymph node as a primarypresenting sign is a very common problem in clinicalpractice. Such lymphadenopathy may be due toacute or chronic inflammation, a primary malignancy of the lymphoid system, a metastasis from an occultprimary malignancy or non-specific hyperplasia. [3]

Diseases affecting cervical lymph nodes are of varying severity starting from simple curable infection to difficult incurable malignant disease. Each diseasemay have different mode of presentation converselymany diseases may present with similar symptoms. For these reasons diagnosis and management often become difficult in cervical lymphadenopathy. It cannot be easily diagnosedon clinical grounds or by routine laboratory investigations alone. [4-5]

In this study our main goal is to evaluatesociode mographic status of cervical lymphadenopathy patients.

## **OBJECTIVE**

# General objective

To evaluate sociodemographic status of cervical lymphadenopathy patients.

### **Specific objectives**

- To detect Disposition and characters of involved cervical lymph node
- To identify Involvement of extra cervical lymph nodes.

## **METHODOLOGY**

Type of study	Cross sectional analytical study.
Place of study	In and out patient Departments of Dhaka medical college hospital, Dhaka.
Study period	December 2012 to December 2013.
Study population	Total 260 patients with cervical lymphadenopathy, persisting for >2 weeks either localized or generalized attending inpatient and outpatient department (particularly surgical, medical, pediatrics, ENT, dermatology) of Dhaka Medical College Hospital, Dhaka.
Sampling technique	Purposive

### Inclusion criteria

- Cases presented with cervical lymphadenopathy were included in this study and subsequent underwent FNAC or lymphnode biopsy.
- Cervical lymphadenopathy persisting > 2 weeks.
- Both sexes of variable ages.

### Method

A detailed history was taken and a thorough physical examination with careful attention to the involved lymphnodes and its draining area was done. All the information was recorded in a fixed protocol.

# Statistical analysis

Collected data was collated and appropriate statistical analysis was done using computer-based SPSS (Statistical program for scientific study) package

### **RESULTS**

In figure-1 shows distribution of the patients according to age where most of the patients belong to 21-30 years age group. Followed by 11-20 years, n=24.5, 0-10 years, n=5, 31-40 years= 13.1. the following figure is given below in detail:

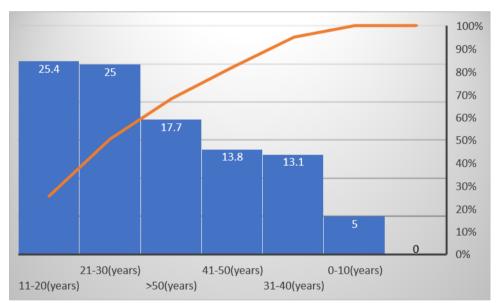


Figure 1: Distribution of the patients according to age.

In table-1 shows gender distribution in cervical lymphadenopathy where female percentage was higher

than male in every cases of disease. The following table is given below in detail:

Table 1: Gender distribution in cervical lymphadenopathy (disease wise) (n=260).

Disease	Male	Female	Male: Female	
Disease	No. (%)	No. (%)	Maie: Female	
Tuberculosis (n=113)	54 (47.5)	59 (52.5)	0.9:1	
Metastatic carcinoma (n=82)	38 (46.7)	44 (53.3)	0.88:1	
Lymphoma (n=44)	23 (52.6)	21 (47.4)	1.10:1	
Reactive change (n=21)	10 (45.4)	11 (54.5)	0.83:1	
Total (n=260)	125 (48.0)	135 (52.0)	0.92:1	

In table-2 shows disposition and characters of involved cervical lymph node. In this result, most of the lymph nodes were unilateral, multiple, firm, discrete, mobile and nontender. In case of tuberculosis, these were unilateral, multiple, firm, matted, mobile and nontender, whereas metastatic nodes were unilateral, multiple, hard,

discrete, fixed and nontender and most of the lymphomas were bilateral, multiple, firm, discrete, mobile and nontender. The following table is given below in detail:

Table 2: Disposition and characters of involved cervical lymph node (n=260).

characters of enlarged lymph nodes	Total (n=260)	Tuberculosis (n=113)	Metastatic carcinoma (n=82)	Lymphoma (n=44)	Nonspecific reactive change (n=21)
Single	70 (27.0)	23 (22.5)	21 (26.7)	5(10.5)	21 (72.2)
Multiple	190 (73.0)	81 (77.5)	57 (73.3)	44 (89.5)	8 (27.8)
Firm	159(61.0)	78 (75.0)	16(20.0)	44 (89.5)	21 (72.2)
Soft	33 (13.0)	26 (25.0)	0	0	8 (27.8)
Hard	68 (26.0)	0	62 (80.0)	5(10.5)	0
Discrete	143 (55.0)	26 (25.0)	62 (73.3)	42 (84.2)	18(63.6)
Matted	117(45.0)	78 (75.0)	20 (26.7)	8(15.8)	10 (36.4)
Mobile	169 (65.0)	81 (77.5)	26(33.3)	44 (89.5)	16 (54.5)
Fixed	91 (35.0)	23 (22.5)	57 (66.7)	0	13 (45.5)
Tender	57 (22.0)	31 (30.0)	13 (16.7)	5(10.5)	8 (27.8)
Non-tender	203(78.0)	190 (70.0)	169 (83.3)	114(89.5)	52 (72.2)
Unilateral	164(63.0)	81 (77.5)	57(73.3)	5(10.5)	21 (72.2)
Bilateral	96 (37.0)	23 (22.5)	21 (26.7)	44 (89.5)	8 (27.8)

In figure-2 shows involvement of extra cervical lymph nodes. Axiliary lymphnode involvement was found in 8.5% cases, abdominal in 6.5% and inguinal in 4.6% cases. The following figure is given below in detail:

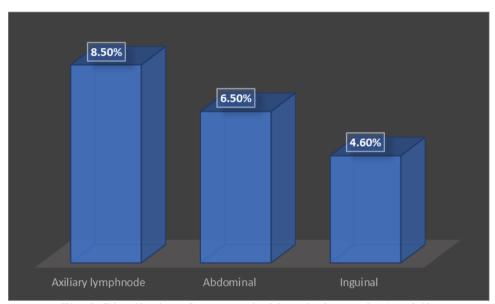


Fig. 2: Distribution of extracervical lymphadenopathy (n = 260)

In table-3 shows comparison of clinical and pathological diagnosis of lymphadenopathy. Where except TB, by pathological test most cases were detected. The following table is given below in detail:

Table 3: Comparison of clinical and pathological diagnosis of lymphadenopathy (n=260).

agnosis of tymphadenopathy (n=200).					
Diagnosis	Clinical	Pathological			
TB	142	113			
Metastatic carcinoma	72	82			
Lymphoma	33	44			
NSRH	13	21			
Total	260	260			

## DISCUSSION

This study of 260 cases of cervical lymphadenopathy is a mere attempt to evaluate the clinicopathological correlation of the biopsy/FNAC proven cases and may not be representative of overall picture in the general population.

Cervical lymphadenopathy is most common in young adults. The present study shows 65% cases between 10-40 years of age. Similar incidence was also observed by in one study, where (69%) in between 10-40 years of age. [6]

Involvement of extra cervical lymph nodes found in 19.6% cases correspond to several studies. [8-10] Variation

in result was due to selection of cases and number of patients.

Cervical lymphadenopathy is most common in young adults. The present study shows 65% cases between 10-40 years of age. Similar incidence was also observed by in one study where (69%) in between 10-40 years of age. [11]

Clinical presentation in this series besides cervical lymphadenopathy were anorexia (85.0%) pyrexia (76.5%), weight loss (69.2%). Anorexia, pyrexia and weight loss are the most common presenting features in tuberculosis, secondary metastasis and lymphoma.

#### CONCLUSION

From our result, we can conclude that, the most common cause of infective enlargement of supraclavicular lymphnode was pulmonary tuberculosis. Further study is needed for better outcome.

#### REFERENCES

- Kumar V, Abbas K, Fausto N; Robbins and Cotran Pathologic basis of disease. 7<sup>th</sup> edition. India. Elsevier. 2004:83.
- 2. Timothy R peter, Kathryn M Edwards; Cervical lymphadenopathy and adenitis, American Academy of pediatrics, Pediatric. Rev 2000; 21:399.
- 3. Leung Alexander KC, Robson, MW Lane. Childhood Cervical Lymphadenopathy. Journal of Paediatric Health Care, 2004; 18: 3-7.
- 4. Oguz A, Karadeniz C, Timel EA, Citak EC, Okur FV. Evaluation of peripheral lymphadenopathy in children. PediatrHematol Oncol, 2006; 23: 549-61.
- 5. Biswas PK, Begum KN, Tubercular cervical lymphadenopathy: Clinico-pathological study Of thirty cases, *TAJ*, 2007; 20(1): 36-8.
- 6. Ferrer R. Lymphadenopathy: Differential Diagnosis and evaluation. American Family Physician, 1998; 15: 1313-20.
- 7. Hunter W. Two introductory lectures. In: His last course of anatomic lectures at His Theatre in Windmill Street. London: J Johnson, 1784.
- 8. Starling EH. On the absorption of fluid from the connective tissue spaces. J Physiol. London, 1986; 19: 312.
- 9. Chessman AD, Holden HB, Richards AES. The neck. In: Mann CV, Russel RCG, editors. Bailey and Love's short practice of surgery. 23rd ed. ELBS with Chapman and Hall, 2000; 256-69.
- 10. Sabin, F.R. On the origin of the lymphatic system from the veins, and the development of the lymph hearts and thoracic duct in the pig. Am. J. Anat, 1902; 1: 367-389.
- 11. Huntington, G.S & C.F.W. McClure. The anatomy and development of the jugular lymph sac in the domestic cat (Felisdomestica). Am. J. Anat, 1910; 10: 177-311.