



Research Paper

A CLINICOPATHOLOGICAL STUDY OF CERVICA LYMPHADENOPATHY

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ABSTRACT

BACKGROUND: Cervical lymphadenopathy is one among the common presentations in ENT OPD with its causes ranging from mild infections to life threatening malignancies.

METHODS: 50 patients presenting to ENT OPD with cervical lymphadenopathy were selected after taking informed consent. Routine clinical laboratory and pathological investigations were done. Radiological investigations and open biopsy were done if required. **RESULTS:** Reactive and malignancy cases accounted for the most cases, contributing for 68 percent (34 out of 50) of all cases, or 34 percent each. Only a quarter of the cases (12 out of 50) were due to tuberculosis. Out of 50 cases, only two were diagnosed with lymphoma and nonspecific lymphadenitis. In this investigation of 50 cases, 44 cases diagnosed clinically matched the FNAC findings, whereas 6 cases were found to be different, resulting in an 88 percent clinical diagnostic accuracy. 43 of the radiologically diagnosed patients had the same FNAC diagnosis, while 7 of them differed on cytological analysis, resulting in an 86 percent radiological diagnostic accuracy. **CONCLUSION:** Clinical evaluation followed by FNAC aids in the diagnosis of a case of cervical lymphadenopathy and can serve as a record for future care. For the diagnosis and treatment of the underlying cause, a thorough clinical examination and thorough investigations are required. If the diagnosis is delayed, the underlying cause may become incurable.

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INTRODUCTION

Nodes that are aberrant in size, consistency, or number are referred to as lymphadenopathy.¹ Significant cervical lymphadenopathy is defined as the lymph nodes in the neck that are swollen by more than one centimetre.² The gold standard investigation in the work up of a neck mass is fine needle aspiration cytology.³ Other diagnostic methods for determining the etiology of cervical lymphadenopathy include ultrasonography, computed tomography, and PET CT neck.⁴ Given the variety of etiologic variables, prompt examinations and treatment are critical in these instances. This research is being carried out in order to determine the most common causes of cervical lymphadenopathy, which will aid in the subsequent investigation and therapy of such cases.

METHODS

50 patients presenting to ENT OPD with cervical lymphadenopathy were selected after taking informed consent. Routine clinical, laboratory and pathological investigations were done. Radiological investigations and open biopsy were done if required.

RESULTS

On analyzing the collected data, it was observed that more cases of cervical lymphadenopathy that is 11 out of 50 cases

(22%) were in the age group of 16 to 25 years, while only 8% of the cases were found to be of age more than 66 years. Our study showed mild male preponderance, 56% (28 out of 50 cases) of cases being male while 44% (22 out of 50 cases) being females. 18% had fever as an associated complaint while 36% had various other complaints. Only 16% had complaints of loss weight or appetite even though malignancy and tuberculosis accounted for 58% of the cases. 50% cases were found to have right side affected and 32% had left side affected. 18% of the cases had bilateral lymphadenopathy. No cases of central lymphadenopathy were a part of the study. 68% of the palpable lymph nodes were found to be firm in consistency while 32% were hard in consistency.

Level II was found to be the most commonly involved group of lymph node. 80% of the palpable nodes were multiple, and most common groups involved in multiple palpable nodes were level II and III. 66% (33 cases out of 50) were found to be benign. Reactive and malignancy accounted for the maximum number of cases covering 68% (34 out of 50 cases) cases in total, 34% each. Even though tuberculosis is thought to be the most common cause of cervical lymphadenopathy in developing countries like India, it accounted for only 24% (12 out of 50) of cases. Only 2 cases each out of 50 cases were diagnosed as lymphoma and nonspecific lymphadenitis.

Tubercular lymphadenopathy was clinically diagnosed in 16 out of 50 cases and radiologically in 19 out of 50 cases but

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according to FNAC it was found only in 12 out of 50 cases. Reactive lymphadenopathy was suspected in 17 out of 50 cases after clinical examination and in 14 out of 50 cases after radiological investigations. After pathological examination, the clinical suspicion was found to be more accurate accounting for 17 out of 50 cases. Malignancy was suspected clinically in 16 out of 50 cases while radiological and pathological examination diagnosed 17 out of 50 cases as malignant cervical lymphadenopathy. Lymphoma and nonspecific lymphadenopathy were diagnosed as reactive lymphadenitis on clinical and radiological assessment, while 2 cases each out of 50 cases were diagnosed in FNAC.

Table 1

Age	Gender		Total
	Male	Female	
5 – 15	5	2	7
16 – 25	7	4	11
26 – 35	2	6	8
36 – 45	2	5	7
46 – 55	3	2	5
56 – 65	6	2	8
66 – 75	1	0	1
76 – 85	2	1	3
Total	28	22	50

Table 2

Level	No
I	14
II	39
III	21
IV	16
V	15
VI	2
VII	0

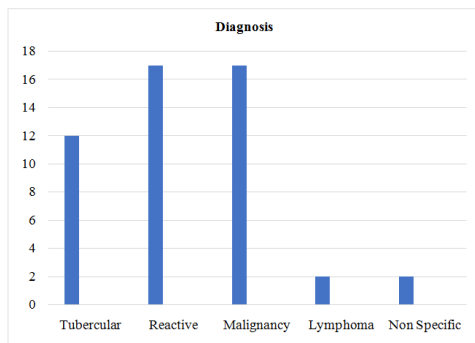


Chart 1

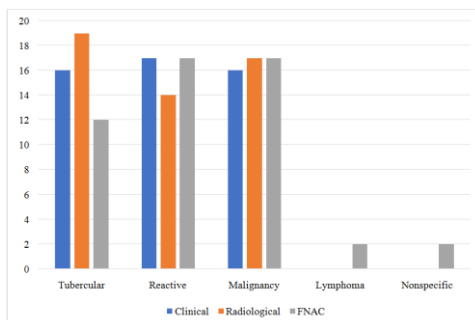


Chart 2

DISCUSSION

A study of 50 cases of cervical lymphadenopathy attending ENT OPD in a tertiary care hospital over a period of 2 years were selected examined and analyzed. The observations and results of the study were compared to similar studies.

In the study done by Devendra K P *et al* which concluded that 54% of the cases were in the age group 13 to 30 years.² Gorle in his study also reached a similar conclusion that more cases are in the age group of 12 to 40 years.⁵ Pandey, *et al* in their study suggested that more number of cases were in the age group of 21-30 yrs.⁶ this was similar to our study which concluded that more number of cases were in the age group of 16 to 25 years amounting to 22% with 11 cases out of 50 cases.

In the study, 56% of males were found to be affected while 44% of females were affected. The M: F ratio is 1.27:1. This was similar to the study conducted by Pandey, *et al* which suggested that the male: female ratio is 1.3:1. In the study conducted by Melkundi *et al* in which 46% of cases had right side involved and 38% had left side involved. Both sides of neck were involved in 14% and central group involvement was seen in 2%. This was comparable to our study in which right side of neck was involved in 25 cases (50%) followed by 16 cases (32%) on left side, bilateral involvement was seen in 9 cases (18%). According to the study conducted by Girija Ghate *et al*, which stated that the commonest cause was reactive lymphadenitis due to tonsillopharyngitis (42%) followed by cervical metastasis of head and neck malignancies (18%) and tuberculosis (14%).⁴ Gautam Biswas stated that taking FNAC as the final diagnosis, tubercular lymphadenopathy was most common diagnosis (45.4%). In metastatic lymphadenopathies, squamous cell carcinoma was found to be most common (8.5%).⁷ In our study we found out that reactive and malignancy accounted for the maximum number of cases amounting to 68% (34 out of 50 cases) cases in total, 34% each. Accounted for only 24% (12 out of 50) of cases. Only 2 cases each out of 50 cases were diagnosed as lymphoma and nonspecific lymphadenitis.

In this study of 50 cases it was found that 44 cases diagnosed clinically matched with the FNAC findings while 6 were found to be different, therefore clinical diagnostic accuracy is 88%, which is similar to the clinical diagnostic accuracy of 82% in the study conducted by Melkundi *et al*.³

CONCLUSION

Cervical lymphadenopathy has a wide range of causes, ranging from acute infections to life-threatening cancers, which necessitate rapid diagnosis and treatment. In majority of the cases, inadequate examination and investigation result in delay in correct diagnosis and may result in inadvertent iatrogenic complication due to improper diagnosis.⁸ It may be inferred from this study that clinical examination followed by FNAC aids in the definite diagnosis^{9,10} of a case of cervical lymphadenopathy and can serve as a record for further management. Only a few situations where FNAC is inconclusive need an open biopsy.

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