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## A study on clinical presentation and pathological features of cervical lymphadenopathy

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### Abstract

In the present study, all the patients had cervical lymphadenopathy (100%) and 8% had the history of pain and fever 21%. The commonest group of lymph nodes involved is level 5 which accounts for 34% in the present series. In investigation fine needle aspiration cytology was found to be accurate, reliable and cheapest method of diagnosis without any significant morbidity and with good patient compliance. Histopathological examination of the lymph node to confirm the diagnosis before starting the treatment is a must. The patient diagnosed as tuberculous cervical lymphadenitis were on ATT drugs for 6 months. Patient diagnosed as nonspecific cervical lymphadenitis were treated with antibiotics and those diagnosed as secondaries/hodgkins lymphoma and non-Hodgkins lymphoma were given chemotherapy/radiotherapy/surgery accordingly. With the advent of powerful and effective ATT surgery has limited value in the recent years. Surgery has come as complement to medical treatment but not as a replacement.

**Keywords:** Lymphnode, FNAC, ATT drugs, tuberculosis, cervical lymphadenitis

### Introduction

Lymph node is an important structure in the defence mechanism of the body. When the infection of the part lying proximal to the gland occurs, latter becomes influenced as a result of localization of these bacteria or viruses or their toxins carried in the lymph <sup>[1, 2]</sup>.

The commonest diseases affecting the cervical lymph nodes are tuberculosis, non-specific lymphadenitis, Hodgkin and non-Hodgkins lymphoma and secondaries. Lymph node tuberculosis is one of the commonest manifestation of extra pulmonary tuberculosis (It accounts to about 16 to 30% of all type of Tuberculosis). The magnitude of the problem can be gauged by the fact that 2-3% of the patients attending general hospitals suffer from glandular tuberculosis. Various methods of treatment are proposed but most recently surgery followed by ATT or ATT alone has become the norm Non-specific lymphadenitis occur due to various organisms and the usual treatment is by antibiotics <sup>[3, 4]</sup>.

Hodgkins and non-Hodgkins lymphoma are usually reported late and are treated with chemotherapy. Those reported early are being treated with radiotherapy. Secondaries present from various organs from abdomen and neck and are treated along with the primary.

Of all the investigation FNAC has emerged an important tool that is more conservative and sensitive. It remains the prime mode in differentiating benign from malignant causes of cervical lymphadenopathy.

In this study all cases presented to surgical department Shadan Institute of Medical Sciences Hyderabad, either as out-patient or in patient were studied are carefully followed based on the protocol formatted and relevant parameters were noted.

This study has been conducted by personally studying 100 cases of cervical lymphadenopathy for a period of 2 years from September 2018 to September 2020. The available data analyzed and discussed to study the incidence, age group, sex ratio etc.

### Aim and Objectives

To study clinical presentation and pathological features of cervical lymphadenopathy.

### Materials and Methods

In the present study, clinical material consist of patients randomly selected with history of cervical lymphadenopathy who have come to surgical OPD in SIMS and were seen as out and inpatient over a period 2 years from Sep 2018 to Sep 2020 are included in this study. Patients were selected randomly and 100 cases were personally studied by me in the present series.

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**Methods**

The details of the cases recorded as shown in the preform clinical data consists of the study done by me personally. In my study the data was taken from the Shadan Institute of Medical Sciences. The diagnosis of cervical lymphadenopathy was made on the basis of detailed case history taking, clinical examination, findings of the patient and investigation was carried out according to the proforma given for the confirmation of the diagnosis.

Investigation like FNAC, blood examination and urine examinations were done as routine. Every patient has undergone FNAC and HIV screening test for suspected case (after obtaining permission from the patient). Radiological examination of the chest was made to find out associated primary lesion in the lung.

Ultrasonic Examination was done in needed cases.

Biopsies were done whenever indicated.

For the cases which ever treated surgically for tuberculosis it was done as a day care surgery. Patient was called in morning for the surgery in the operation theatre. The patients were put on prophylactic antibiotics on previous night.

All these cases had undergone operation under general anesthesia, a few under local anesthesia.

Post operatively the patient was followed from the day of operation till the day of discharge. At the time of discharge, confirmed patient of tuberculosis were advised to continue the full course of anti-tubercular drugs and further follow up done every one month till course lasts.

For the non-specific case the treatment was mostly surgical and followed by antibiotics and followed up to 12 months.

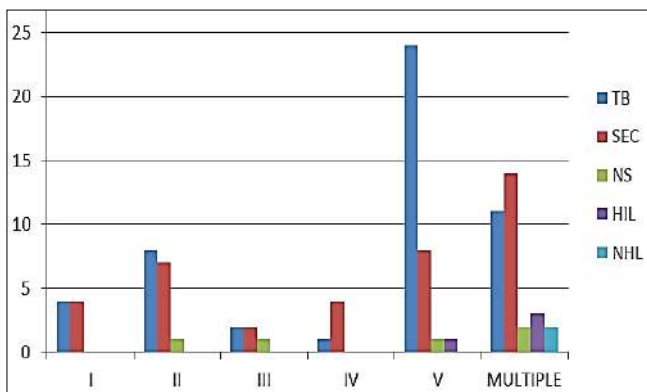
For the case diagnosed as malignancy/secondaries necessary management was done in the form surgery/radiotherapy/chemotherapy

Further follow-up of the patient was done with periodic observation of the wellbeing of the patient. Clinical assessment and progress was noted.

**Results and Discussion**

**Table 1:** Level of lymph nodes involved

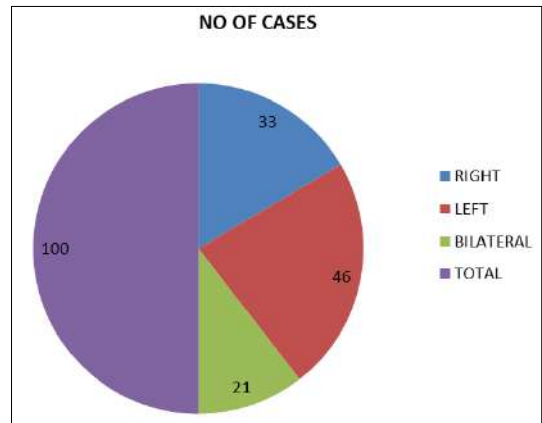
Level	TB	Sec	NS	HIL	NHL	Total
I	4	4	-	-	-	8
II	8	7	1	-	-	16
III	2	2	1	-	-	5
IV	1	4	-	-	-	-
V	24	8	1	1	-	34
Multiple	11	14	2	3	2	32
Total	50	39	5	4	2	100



**Fig 1:** Level of lymph nodes involved

**Table 2:** Side of nodes involved

Side of the work	No. of cases	Percentage
Right	33	33
Left	46	46
Bilateral	21	21
Total	100	100



**Table 2:** Side of nodes involved

The above table shows that left side nodes of the neck are most commonly involved

**Table 3:** Clinical symptoms

Symptoms	Swelling	100
	Pain	8
	Fever	21
	Cough	2
	Sinus	1
	Others	30
Consistency	Firm	72
	Hard	27
	Variable	-
	Rubbery	1
	Soft	0
Matting	Present	10
	Absent	90
No. of lymph nodes	1-2	54
	3-4	27
	5-6	8
	7-8	6
	Multiple	5

In other studies, we found out the commonest presenting feature of cervical lymphadenopathy was swelling in the neck. Cough, fever, pain in swelling, loss of appetites and loss of weight etc. are other features. 21% of the patient had come with fever. This study results are similar to other studies such as conducted by research Committee of tuberculosis of India.

Results are similar to other studies such as conducted by research committee of Tuberculosis of India

**Table 4:** Showing side involved

Side of the work	No. of cases	Series %
Right	33	33
Left	46	46
Bilateral	21	21

Lymphnode on the left side of the neck are more commonly involved than that of the right side of the neck

**Table 5:** Showing treatment given

Type of treatment	No. of cases	Series %
ATT + Surgery	2	4
ATT Alone	48	96

After confirmation, they were started on ATT for a period of 6 months for the first two months INH, Rifampicin, Ethambutol and pyrazinamide was given. The continuation phase of subsequent 4 months only INH and Rifampicin was given. Doses were calculated depending upon the body weight of the patients. 2 cases underwent surgical treatment.

The treatment of cervical lymphadenitis is mainly medical and is supported by surgery. In the recent years, because of the advancement in the chemotherapy the role of surgery is limited to drainage of cold abscess or excision of residual lymph node mass or scars [5-7].

### Follow up

#### Tuberculosis

Cases were followed one month from time of commencement of ATT to period of 6 months with a regular follow up of once in every 4 months. During the period of follow up the patient wellbeing was noted. Clinical examination and ESR estimation were done. Improvement in the general conditions of the patient was observed in 75% of the cases studied. Within 4 weeks after starting the treatment. The regression in the size of the glands was noticed in 60% of cases. But there was no complete disappearance in the swelling. In most of the cases the ESR level came down to normal or just above the normal level with in 3 months after starting the treatment.

#### Non-specific lymphadenitis

5 case of non-Specific lymphadenitis were studied in the present series. All cases were treated with antibiotics and the lymph nodes regressed in size within 2 months. No surgical excision was done.

#### Hodgkins/Non-Hodgkins/secondaries

In the present series, 4 cases of Hodgkins lymphoma, 2 case of non-Hodgkins lymphoma and 39 cases of secondaries were studied. Depending upon the stage and operability of the diseases chemotherapy/radiotherapy/surgery was done accordingly [8-10].

### Conclusion

Most common cause of cervical lymphadenopathy is tuberculosis, reactive lymphadenitis and metastatic secondaries. Fine-needle aspiration cytology is a cheap, quick, readily available and dependable diagnostic modality and can be used as a first line investigatory tool in outdoor departments.

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### Conflict of interest

None

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Nil

### References

- Pangalis GA, Vassilakopoulos TP, Boussiatis VA, Fessas P. Clinical approach to lymphadenopathy. *Semin Oncol* 1993;20:570.
- Chau I, Kelleher MT, Cunningham D, Norman AR, Wotherspoon A, Trott P *et al.* Rapid access multidisciplinary lymph node diagnostic clinic: analysis of 550 patients. *British Journal of Cancer* 2003;88(3):354-61.
- Jha BC, Dass A, Nagarkar NM, Gupta R, Sighal S. Cervical tuberculous lymphadenopathy. Changing clinical patterns and concepts in management. *Postgraduate Med. J* 2001;77(905):185-7.
- Arora B, Arora DR. FNAC in diagnosis of tubercular lymphadenitis. *Indian J Medical Research* 1990;91:189-92.
- Padhy RK, Maheshwari A, Kumar DB. A clinicopathological study of cervical lymphadenopathy. *JEMDS* 2015;504:3497-507.
- Vedi JN, Patel S, Ghormare A. Clinicopathological study in patients of cervical lymphadenopathy. *Odisha J Otorhinolaryngology Head and Neck Surg* 2012;6:14-7.
- Wilson GR, McLean NR, Chippindale A, Campbell RS, Soames JV, Reed MF. The role of MRI in scanning in the diagnosis of cervical lymphadenopathy. *Br. J Plast Surg* 1994;47:175-9.
- Pamra SD. A Critical Appraisal of Relative Merits of Radiology and Bacteriology in Case Finding. *Indian journal of Tuberculosis* 1987;34:96.
- Purohit SD, Gupta ML, Sarkar SK, Gupta PR, Tanwar KL, Jain D. A novel clinical scoring method for diagnosis of tubercular cervical lymphadenitis. *Ind. J Tub* 1987;34:22.
- Baskota DK, Prasad R, Sinha KB, Amatya RC. Distribution of lymph nodes in the neck in cases of tuberculous cervical lymphadenitis. *Acta Otolaryngol* 2004;124:1095-8.