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A Study on Clinical Profile of Patients with Chronic Cervical Lymphadenopathy

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ABSTRACT
Lymph nodes are highly effective filter interposed in path of lymph drainage form nearly all region of the body. One of their functions is to limit the dissemination of bacteria and malignant cell by their removal from the lymph before it reaches the blood via the thoracic duct. The clinical material consists of patients randomly selected with history of cervical lymphadenopathy, who came to E.N.T. OPD. Patients were selected randomly and 100 cases were personally studied by me in present series. Jugulo-digastric group was found to be maximum affected (36) in all diseases then Rt Jugulo-Omomyid, followed by submandibular and Supra clavicular. The maximum number of symptom was of swelling (100), next most complaint was pain (48) and fever (20). Firm in consistency (84) was most commonest finding.

INTRODUCTION

Lymph nodes are small oval or reniform bodies 0.1-2.5 cm long lying in the course of lymphatic vessel. Each usually has a slight indentation on one side, the 'hilum', through which blood vessels enter and leave an 'efferent lymphatic vessels also emerge. Several efferent lymphatic vessels enter peripherally. Lymph nodes have a highly cellular cortex and a medulla, containing numerous, poorly demarcated cavities. The cortex is deficient at the hilum, where the medulla reaches the surface., thus the efferent vessel emerges from the medulla, while afferent vessels empty into the cortex[1,2]. Lymph nodes are highly effective filter interposed in path of lymph drainage form nearly all region of the body. One of their functions is to limit the dissemination of bacteria and malignant cell by their removal from the lymph before it reaches the blood via the thoracic duct[3]. When there is an infection in a distant part of the body, the regional lymph node become inflamed as a result of the localization of bacteria or toxin carried in the lymph to the gland. The lymph node contains a very efficient filtration system in the cortical and medullary sinus, these are lined with phagocytic cell that engulf bacteria and red cells or other particulate material. The efficiency of the filtration system can be demonstrated by the direct perfusion of pathogenic bacteria into the lymphatic that are afferent to a lymph node, simultaneous culturing of the efferent lymphatic will show to be sterile. However, lymph node are much less efficient barrier to lymph borne cancer cell[4]. Therefore in surgical excision of a malignant tumour, an effort is made to prevent metastasis by removing the regional lymph node as well as the tumour. Lymph nodes have as very important role in the body's immunological defenses by virtue of the ability of their lymphocyte and plasma cell to generate specific antibodies.

MATERIALS AND METHODS

The clinical material consists of patients randomly selected with history of cervical lymphadenopathy, who came to E.N.T. OPD. Patients were selected randomly and 100 cases were personally studied by me in present series.

Inclusion Criteria:

- Patients with enlarged lymph nodes more than 3 months.
- Age >5 years and <75 years.

Exclusion Criteria:

- Age <5 years and >75 years.
- Neck swellings other than lymphadenopathy.
- Acute causes of cervical lymphadenopathy.

A pro-forma is drafted for study of all patients presenting with chronic cervical lymph node was used. A detailed history was taken and a note was made regarding age, sex, duration of symptoms, constitutional symptoms and history of contact with tuberculosis patient. A complete physical examination was carried out. In local examination, importance was given to the site, size, laterality, number, matted/discrete, secondary changes, level of the cervical lymph nodes and involvement of other (inguinal/axillary) lymph nodes. Systemic examination also carried out. An attempt was made to Find out the primary tumour in cases of lymph nodes suspicious as secondaries in neck. After making a clinical diagnosis, further investigations were carried out to con rm the diagnosis. Routine investigations included hematological and radiological. FNAC was put in the front line for diagnosing and to get a cytological diagnosis at hand. Immunohistochemistry was not done because of limitation of those facilities. Lymph node biopsy was carried out meticulously, it was studied grossly and sent to pathologist for expert opinion. Further tests were carried out on the basis of histopathological diagnosis (for example, secondaries in the neck). Further, contrast radiological investigations, Pan-endoscopy carried out in relevant cases. Having come to conclusion of diagnosis, treatment was instituted appropriately. Medical treatment was employed predominantly for conditions like tubercular adenitis, infective lymph node swellings. All patients were asked to attend the surgical outpatient department for follow-up after discharge. Necessary advice was given.

RESULTS AND DISCUSSIONS

Table 1: Showing Number of Cases and Disease in Present Study

SL. No.	Diagnosis	Number	Percentage
1.	TB	68	68
2.	HL	2	2
3.	NHL	8	8
4.	Non speci c	8	8
5.	Secondaries	14	14

The maximum incidence was found to be of Tuberculosis which were 68 (68%) cases, next was secondaries 14 (14%), Nonspeci c lymphadenitis 8 (8%), NHL 8 (8%) and Hodgkins Lymphoma 2 (2%).

Table 2: Showing Age Distribution

Age (in years)	Number	Percentage
5-14	10	10
15-24	31	31
25-34	25	25
35-44	16	16
45-54	10	10
55-64	6	6
65-74	2	2
Total	100	100

(Table no 2) shows age wise distribution of cases. The maximum incidence was found to be between the ages of 15-24 years 31 cases (31%), next is between 25-34 years 25 cases (25%), then between the ages of 35-44 years 16 cases (16%), between the age groups 5-14 years 10 cases (10%), between age groups 45-54 10

cases (10%), between age groups 55-64 years 6 cases (6%) and between 65-74 years 2 cases (2%).

Table 3: Showing Sex Distribution

	Diagnosis					
Sex	**TB**	**HL**	**NHL**	**NS**	**SCC**	**Total**
Male	14	2	6	4	12	38
Female	54	0	2	4	2	62
Total	68	2	8	8	14	100

(Table No. 3) shows maximum cases were of female patient 62 (62%) and 38 (38%) were male respectively. The ratio in tuberculosis was 3.8:1 (Female: Male ratio), the incidence of secondaries were found more in men. Hodgkin's were found in male only. In non-Hodgkin's the ratio was 3:1 (Male: Female ratio).

Table 4: Showing Distribution According to Groupings

Group	**TB**	**HL**	**NHL**	**NS**	**SCC**	**Total**
B/L SC	0	0	0	2	0	2
Both SM	2	0	0	0	0	2
JG	36	0	0	0	0	36
JG both	2	0	0	0	0	2
JG both sides						
Sc on Rt. Sides	0	0	0	2	0	2
Lt SM						2
Lt. Sc	4				4	8
Preauricular	4					4
PT	4		4			8
Rt SC	4			2		6
Rt SM					2	2
Rt. JO	2	2		2	8	14
Sc			4			4
SM	8					8

(Table No. 4) shows the group of lymph node affected in the neck. Jugulo-digastric group was found to be maximum affected (36) in all diseases then Rt Jugulo-Omomyid, followed by submandibular and Supra clavicular.

Table 5: Showing Mode of Presentation

Symptoms		
	Swelling	100
	Pain	48
	Fever	20
	Cough	4
	Sinus	0
	Others	12
Consistency	Firm	84
	Hard	10
	Variable	4
	Rubbery	2
	Soft	-
Matting	Present	32
	Absent	40
Fixing	Present	12
	Absent	68
Number	1	58
	2	20
	3	2
	4	12
	M	4

Table-5 shows that the maximum number of symptom was of swelling (100), next most complaint was pain (48) and fever (20). Firm in consistency (84) was most commonest finding. Matting was present in 32 patients. Fixity was a feature of 12 patients. Most of them were single nodes, maximum was 4, in 4 cases lymph nodes were many.

Table 6: Age Incidence

Series	**1-10**	**11-20**	**21-30**	**31-40**	**41-50**	**51-60**	**61-70**
Research committee of the tuberculosis association of India[5]	23	59	88	32	21	10	--
Present series	10	31	25	16	10	6	2

The above tables shows the majority of cases were in the age group between 11-30 years. The same table is compared with other series. In Research committee of the tuberculosis association of India series shows that the majority of cases in their study was between 11-30 years. The same observation was made in our study also with age of maximum incidence was between 11-30 years. In this age group the lymphatic system plays an important role lymph nodes act as powerful second line of defence in holding up of the infection (Krishnamurthy)[5].

Table 7: Sex Incidence

Series	**Male**	**Female**
Research committee of the tuberculosis association of India6 Nanda B.P, Pandhi. N.C, Dandapat. M.C. (Sept. 1983 May 1985)7	100	133
Present Study.	38	62

In my study female to male ratio was 1.6:1 as compared with other study, which showed 1.33:1 in Research committee of the tuberculosis association of India and 1.1:1 in Nanda B.P *et al.* A female predominance had been observed in other series as shown in the above table.

Table 8: Clinical Symptoms

	Swelling	100
	Pain	48
	Fever	20
Symptoms	Cough	4
	Sinus	0
	Others	12
Consistency	Firm	84
	Hard	10
	Variable	4
	Rubbery	2
	Soft	-
Matting	Present	32
	Absent	40
Fixing	Present	12
	Absent	68
Number	1	58
	2	20
	3	2
	4	12
	M	4

In our study we found that the complaints for which the patients had come to the hospital were swelling in the neck, for which 100% of patients had come, 48% of patients had come with pain in the swelling. This study results are similar to other studies such as conducted by Research Committee of the Tuberculosis Association of India[6-8].

CONCLUSION

Of the 100 cases studied, tuberculosis had the maximum incidence (68%), followed by metastatic (14%) diseases of lymph nodes. Overall age at presentation was maximum between 15-24 years followed by 25-34 years. Between 11-30 years, tuberculosis had the maximum incidence and between 41-50 years metastatic disease had the maximum followed by Hodgkin's disease. All the patients had cervical lymphadenopathy (100%) and 48% had history of pain and 20% with history of fever. They were put on anti-tubercular drugs for 6 months, 1 patient who had cold abscess and cervical lymphadenopathy with sinus were treated by incision and drainage and anti-tubercular drugs the recovery was 100%. The cheapest and the most reliable method of diagnosis was ne needle aspiration cytology.

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