



CODEN (USA): IAJPBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

<http://doi.org/10.5281/zenodo.438850>

Available online at: <http://www.iajps.com>

Research Article

CLINICAL PATTERN AND DIAGNOSIS OF THE CERVICAL LYMPHADENITIS AT TERTIARY CARE HOSPITAL

Dr. Rasool Bux Behan*¹, Dr. Adnan Ahmed², Dr. Mushtaque Ali memom³

¹ MBBS, MS (Assistant professor), Department of general surgery, LUMHS

² MBBS, FCPS (Assistant professor), Radiology department, LUMHS

³ MBBS, DLO, FCPS (Assistant professor), ENT department, LUMHS

Received: 03 March 2017

Accepted: 10 March 2017

Published: 28 March 2017

Abstract:

Objective: Determine the clinical presentation and diagnosis of the cervical lymphadenitis at tertiary care Hospital.

Material and methods: This was a descriptive and case series study and was carried out at general surgery department of LUMHS Hyderabad/Jamshoro. Study was conducted with duration of on years from 2015 to July 2016. Both genders were selected. Complete relevant laboratory investigations were carried out. All patients were underwent FNAC, and also incisional biopsies were carried out under the local anesthesia in some cases where it was needed for proper diagnosis. I cases having abscess, the biopsies were done from walls of lymph nodes and puss was drained. All the specimens were sent to diagnostic laboratory for histopathological diagnosis. All the data was entered in the predestined proforma.

RESULTS: Total 46 cases were selected in this series with presentation of cervical lymphadenitis, patient's mean age was found 34.21+5.12 years. Female gender was found in the majority 28(40.87%). Fever was commonest clinical feature in 76% cases. Following by swelling, abscess, solid nodes, weight loss, loss of appetite and others were noted with percentage of 55.69%, 39.13%, 45.65%, 58.69% and 21.73% respectively. Tuberculosis was found commonest diagnosis in 57.14% cases, reactive hyperplasia in the 02(04.34%), Metastasis in 1 case, Lymphoma in 10.86% cases, Kikuchi in 1 case, non-specific was found in 10.86% cases while SCC was noted only in 1 case.

CONCLUSION: Cervical lymphadenitis was most frequent in females. Commonest clinical features were Fever, swelling, weight loss, loss of appetite and abscess. Most common histopathological diagnosis was tuberculosis and lymphoma, while malignancy was only in one case.

Key words: Cervical lymphadenitis, clinical pattern, diagnosis

Corresponding author:

Dr. Rasool Bux Behan

NMC, near national super mart,

Hala Naka hyd.

Number: 0313-2851728

dr.sajidarain@gmail.com

QR code



Please cite this article in press as Rasool Bux Behan *et al*, *Clinical Pattern and Diagnosis of the Cervical Lymphadenitis at Tertiary Care Hospital*, *Indo Am. J. P. Sci*, 2017; 4(03).

INTRODUCTION:

Cervical lymphadenitis is the common clinical presentation due to a number of reasons varying from benign self-limiting reactive hyperplasia to infections to malignant disorders [1]. It is frequently defined as lymph nodal tissue of the cervical region more than 1cm in the diameter [2]. Head and the neck have an exceptionally rich lymphatic drainage [3, 4]. These are commonest site of involvement and prevalent as 60% to 90% cases with or without association with the other lymphatic tissues [5]. Raised incidence of the mycobacterial lymphadenitis in the population of Asia. Tuberculosis is the commonest risk factor of it which may present as a distinct entity or as a part of systemic tuberculosis [6]. Chronic cervical lymph node enlargement is a diagnostic dilemma for the clinicians as it may harbor an underlying disease. In the western countries chronic cervical lymphadenopathy due to tuberculosis is not relevant as compare to our country where it is a common problem [7,8]. Despite the decline of pulmonary and visceral tuberculosis in the west, incidence still remains high of tuberculous lymphadenitis in Pakistan[9]. FNAC has been presented in the lab diagnostics since last a few decades [10], there are as yet numerous circumstance, where excisional biopsies is obligatory, particularly in associated cases with lymphoproliferative events. In a study refers to a review on the part of ultrasound (US) guided core biopsy in diagnosis and type of the lymphoma in regions of the neck and head [11].

From histopathological approaches, non-specific and reactive diagnosis are commonest, however a critical number of the patients are presented with granulomatous inflammation, the most widely recognized cause being tuberculosis is worldwide [12]. It is also a typical finding on clinical examination in pediatric population [13]. Different studies showed different diagnosis except tuberculosis. Therefore aim of present study was to assess the histopathological diagnosis of cervical lymphadenitis at tertiary care Hospital.

MATERIAL AND METHODS:

This was a descriptive and case series study and was carried out at general surgery department of LUMHS Hyderabad/Jamshoro. Study was conducted with duration of on years from 2015 to July 2016. All the cases having cervical lymph node were included from the general surgery OPD. Both genders were selected. Complete relevant laboratory investigations were carried out including CBC+ESR, neck ultrasound, chest X-Ray and also MRI in some cases. ENT examination was carried out in the needed cases. After complete baseline workup all patients were underwent FNAC, and also incisional biopsies were carried out under the local anesthesia in some cases where it was needed for proper diagnosis. While in the cases having presentation of abscess, the biopsies was done from walls of lymph nodes and puss was drained. All the biopsies were carried out by skilled and experienced surgeons. All the specimens were sent to diagnostic laboratory for histopathological diagnosis. Data regarding demographic characteristics, clinical features and histopathological diagnosis was entered in predestined proforma. For data analysis SPSS was used version 20.

RESULTS:

Total 46 cases were selected in this series with presentation of cervical lymphadenitis, patient's mean age was found 34.21±5.12 years. Female gender was found in the majority 28(40.87%), while male gender was 18(39.13%). Multiple lymphadenitis was found in majority of the cases 26(56.53%), while 20(43.47%) cases were found with presentation of single lymphadenitis, results showed in **TABLE: 1**.

Fever was commonest clinical feature in 76% cases, following by swelling, abscess, solid nodes, weight loss, loss of appetite and others were noted with percentage of 55.69%, 39.13%, 45.65%, 58.69% and 21.73% respectively, results showed in **FIG:1**.

Tuberculosis was found commonest diagnosis in 57.14% cases, reactive hyperplasia in the 02(04.34%), Metastasis in 1 case, Lymphoma in 10.86% cases, Kikuchi in 1 case, non-specific was found in 10.86% cases while SCC was noted only in 1 case. **TABLE: 2**.

Table: 1: Patients distribution according to demographic characteristics. n=46

Basic variables	Frequency/%
Age(mean+SD)	34.21+5.12 years
Gender	
Male	18(39.13%)
Female	28(40.87%)
Quantity of enlarged nodes	
Single	20(43.47%)
Multiple	26(56.53%)
Size of enlarged nodes	
Less than 3 CM	31(67.39%)
More than 3 CM	15(32.61%)
Site of enlarged nodes	
Unilateral	19(41.30%)
Bilateral	27(58.70%)

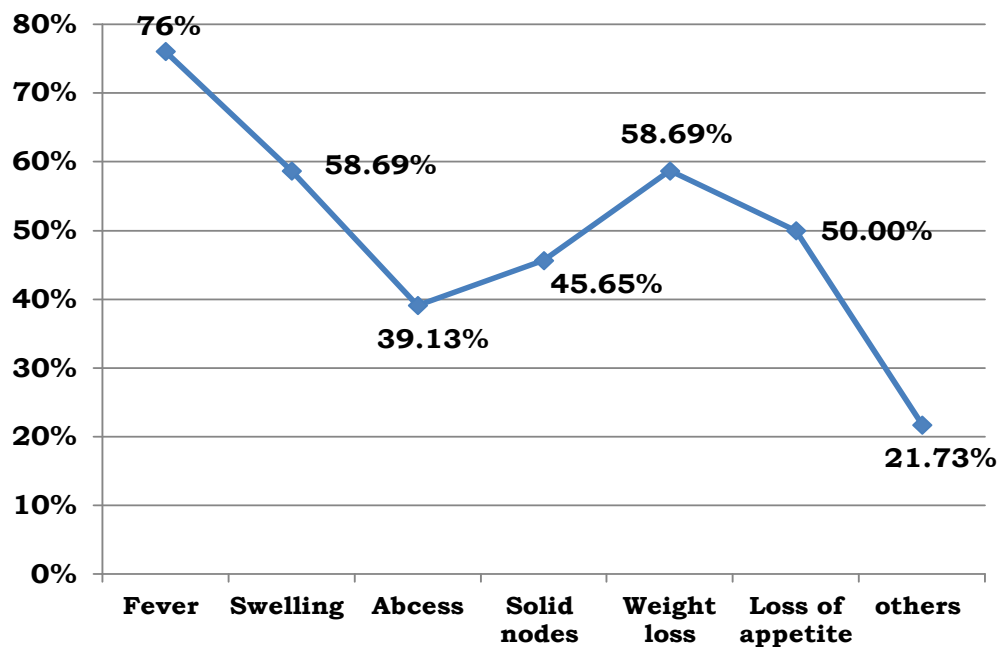


Fig 1: Patients distribution according to clinical pattern n= 46

Table 2: Cases distribution according histopathological diagnosis n=46

Histopathology	Frequency (%)
Tuberculosis	31(67.39%)
Reactive hyperplasia	02(04.34%)
Metastasis	01(02.17%)
Lymphoma	05(10.86%)
Kikuchi	01(02.17%)
Non specific	05(10.86%)
SCC	01(02.17%)

DISCUSSION:

Total 46 cases were selected in this series with presentation of cervical lymphadenitis; patient's mean age was found 34.21±5.12 years. Similarly Channa MA et al [10] reported that mean age of the patients was 32.9 years with the range of 14 to 70. Albasri AM et al [14] reported that patient's mean age was 33.9 years with range of 2.5 to 96 years. In this study female gender was found in the majority 28(40.87%), while male gender was 18(39.13%). Our study was quite consistent with study conducted through Ahmed I [15] et al in our country (male 16.6%, female 83.4% with male: female ratio 1:5), in another Indian study of Jha BC et al [16] reported that male were 42.85% and female were 57.15% with ratio 1:1.3 respectively. While in a study of Magsi PB et al [17] found apposite findings as male were 57.14% and female were 42.86% with the ratio 1.33:1.

In this study fever was commonest clinical feature in 76% cases, following by swelling, abscess, solid nodes, weight loss, loss of appetite and others were noted with percentage of 55.69%, 39.13%, 45.65%, 58.69% and 21.73% respectively. As well as Channa MA et al [10] reported that 41% of our patients presented with neck swellings, 18.5% collar stud abscess while 3% had discharging sinus. Our findings also comparable with the regional study conducted by Malik GA et al [18] in which stated that 71 % cases had neck swellings while 12.6% had an abscess and 2% had discharging sinus. In a recent study of Kamal MS et al [19] reported similar results as that 45 (69.2%) had solid lymph nodes out of all cases, while 14(21.5%) were with abscess and 9.2% cases had discharging sinus. We found lymph node less than 3 CM found in 31(67.39%) cases and more

than 3 CM were in 15 (32.61%) cases. On other hand Kamal MS et al [19] reported that in 54.8% cases lymph node size was <3cm, in 37.1% cases it was 3-6 cm and in the 8.1% cases it was >6cm in diameter. Tuberculosis was found commonest diagnosis in 57.14%. Similarly Alam J et al [20] reported that 68.8% patients were having cervical lymph node enlargement due to tuberculosis diagnosed on excisional biopsy. It was consistent with a study of Yassin MA et al [21] in which he reported that tuberculous lymphadenopathy was in 72.8% cases. In another local study conducted by Umer MF et al² reported that 70% patients having tuberculosis infection. While Javaid M et al [22] demonstrated that incidence of tuberculous lymphadenopathy to be 57.2%. In the favor of our study Choudhry et al [23] stated that 58% cases had cervical lymphadenitis, out of all study participants. On other hand in another study stated that tuberculous lymphadenitis prevalence is 36%, although this risk factor was commonest in their study, but it is very less as compare to our study. On other hand NIZAMI KM et al [24] reported that 60(85.75%) cases had tuberculous lymphadenopathy, this incidence of tuberculous lymphadenopathy is high from our study. In our study reactive hyperplasia in the 02(04.34%), Metastasis in 1 case, Lymphoma in 10.86% cases, Kikuchi in 1 case, non-specific was found in 10.86% cases while SCC was noted only in 1 case. In the comparison of our study NIZAMI KM et al²⁴ reported that 7(10%) patients reactive hyperplasia found while two patients (2.85%) had lymphoma and only one patient (1.42%) had metastatic lesion from thyroid carcinoma. Khan I et al [4] reported that reactive hyperplasia and non-specific inflammation was noted in the 19.3% cases having lymph nodes.

Similar findings were found also in some other studies [25-27].

CONCLUSION:

We concluded that cervical lymphadenitis was most frequent in females. Commonest clinical features were Fever, swelling, weight loss, loss of appetite and abscess. Most common histopathological diagnosis was tuberculosis and lymphoma, while malignancy was only in one case. FNAC is the reliable and noninvasive diagnostic tool for it. By early diagnosis and the treatment can reduce the morbidity and mortality.

REFERENCES:

1. Samad L, Lewis G, Nour S. Management of superficial neck abscesses. JPMA. The Journal of the Pakistan Medical Association. 2003;53(9):413-7.
2. Umer MF ,Mehdi SH, Mutaqi A, Hussain SA;” Presentation and etiological aspects of Cervical Lymphadenopathy at Jinnah Medical College Hospital Korangi; Karachi.” PJS, 25(4),2009,224-6
3. Van de Schoot L, Aronson DC, Behrendt H, Bras J. The role of fine needle aspiration cytology in children with suspicion lymphadenopathy. J Pediatr 2001; 361: 7-11
4. Khan I, Khattak EG, Muhammad I, Khan A, Khan MF, Ahmed N. Cervical lymphadenopathy: an audit of 116 cases. 2015;7;1;6-9
5. Manolidis S, Frenkiel S, Yoskovitch A, Black M. Mycobacterial infections of the head and neck. Otolaryngol Head Neck Surg. 1993;109:427-433.
6. Bayazit YA, Bayazit N, Namiduru M. Mycobacterial cervical lymphadenitis. ORL J Otorhino laryngol Relat Spec 2004;66:275-80
7. Mori Y, Ocho S, Kinaga S, Jwasaki S, Kubota K. Clinical issues of tuberculosis lymphadenitis: evaluation of 5 cases with packet formation. Nihon Jibiinkoka Gakkai Kaiho 1992;95:317-23.
8. Sreeramareddy CT, Panduru KV, Verma SC, Joshi HS, Bates MN. Comparison of pulmonary and extra pulmonary tuberculosis in Nepal: a hospital based retrospective study. BMC Infect Dis 2008;8:1-7.
9. Channa MA, Urooj R, Mirza MR, Gooda MR, Jaleel F, Khan S, et al. Frequency of tuberculosis in cervical lymphadenopathy: our experience. Pak J Surg 2010;26:28-30.
10. Handa U, Mundi I, Mohan S. Nodal tuberculosis revisited: a review. The Journal of Infection in Developing Countries. 2011;9;6(01):6-12.
11. Burke C, Thomas R, Inglis C. Ultrasound-guided core biopsy in the diagnosis of lymphoma of the head and neck. a 9 year experience. Br J Radiol, 2011;84;727-32
12. Fazal-I-wahid, Habib-Ur-Rehman, Ahmad I. Extra pulmonary tuberculosis in patients with cervical lymphadenopathy. J Pak Med Assoc 2013; 63;1094-7.
13. Rajasekaran K, Krakovitz P. Enlarged Neck Lymph Nodes in Children. Pediatr Clin N Am 2013; 60, 923-36.
14. Albasri AM, El-Siddig AA, Hussainy AS, Alhujaily AS. Pattern of lymph node pathology in western Saudi Arabia. Asian Pac J Cancer Prev. 2014 Jan 1;15(11):4677-81.
15. Ahmed I, Hashmi S, Tanwir F, Ahmed S. Tuberculosis and Cervical Lymphadenopathy-A study of 175 cases in a Tertiary Care Hospital. Journal of Oral Hygiene & Health. 2013 Dec 29:1-3.
16. Jha BC, Dass A, Nagarkar NM, Gupta R, Singhal S. Cervical tuberculous lymphadenopathy: Changing clinical pattern and concepts in management. Postgrad Med J. 2001;77:185-187
17. Magsi PB, Jamro B, Shaikh AA, Sangi HA. An audit of 140 cases of cervical lymphadenopathy at tertiary care hospital. Golam J Med Sci. 2013;11(1):47-49
18. Malik GA, Rehan TM, Bhatti SZ, Riaz JM, Hameed S. Relative frequency of different diseases in patients with lymphadenopathy. Pak J Surg. 2003;19(2):86-9.
19. Kamal MS, Hoque MH, Chowdhury FR, Farzana R. Cervical Tuberculous Lymphadenitis: Clinicodemographic profiles of patients in a secondary level hospital of Bangladesh. Pakistan Journal of Medical Sciences. 2016 May;32(3):608.
20. Alam J, Nasir II, Iftikhar M, Khan SA, Aslam R. Frequency of tuberculosis in cervical Lymphadenopathy, our experience. KJMS 2015;8;2;188-199.
21. Yassin MA, Olobo JO, Kidane D, Negesse Y, Shimeles E, Tadesse A, et al. Diagnosis of tuberculous lymphadenitis in Butajira, rural Ethiopia. Scand J Infect Dis 2003;35:240-3.
22. Javaid M, Niamatullah, Anwar K, Said M. Diagnostic value of fine needle aspiration cytology

(FNAC) in cervical lymphadenopathy. J Postgrad Med Inst 2006;20:117-20.

23. Choudhury N, Bruch G, Kothari P, Rao G, Simo R. 4 years' experience of head and neck tuberculosis in a south London hospital. J R Soc Med 2005;98:267-9.

24. NIZAMI KM, ALAM M, Bajwa AR. Prevalence of Tuberculosis in Cervical Lymphadenopathy at Avcinna Medical College & Hospital Lahore. Pakistan Journal of Head & Neck Surgery. 2012;132:13-4.

25. Olu-Eddo AN, Ohanaka CE. Peripheral lymphadenopathy in Nigerian adults. J Pak Med Assoc. 2006; 56(9): 405-8.

26. Adesuwa Olu-Eddo N, Egbagbe EE. Peripheral lymphadenopathy in Nigerian children. Niger J Clin Pract. 2006; 9(2): 134-8.

27. Dedivitis RA, Pfeutzenreiter Jr EG, de Castro MAF. Aspiration biopsy by fine needle of cervical adenopathy guided by ultrasonography. Intl. Arch Otorhinolaryngol 2009; 13: 417-20.