



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1464605>Available online at: <http://www.iajps.com>

Research Article

**THE AETIOLOGICAL AND CLINICAL PRESENTATION OF
CERVICAL LYMPHADENOPATHY**¹Dr. Hafiz Gulfam, ²Dr. Saima Zaman, ³Dr. Faizan Bin Shabbir¹Yangtze University, China²Jinnah Hospital, Lahore³Islam Medical College, Sialkot**Abstract:****Objective:** To evaluate the etiology and presentation of cervical lymph node adenopathy.**Study design:** A descriptive study.**Configuration and duration:** For one year duration from June 2017 to June 2018 in the Department of Surgery Unit II of Jinnah Hospital, Lahore.**Methodology:** A total of 85 patients with cervical lymphatic adenitis were included in the study. Excisional biopsy was performed under local and general anesthesia according to the age of the patients.**Results:** The most common pathology was cervical tuberculous lymphatic adenitis (75.5% of patients). No specific cervical lymphatic adenitis was found in 15.3% of the cases. Patients with lymphoma remained.**Conclusion:** Tuberculous lymphatic adenitis is the most common pathology in many patients without systemic symptoms.**Key Words:** Cervical lymphadenopathy, Tuberculosis, Lymphoma.**Corresponding author:****Dr. Hafiz Gulfam,**

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Please cite this article in press Hafiz Gulfam et al., *The Aetiological and Clinical Presentation of Cervical Lymphadenopathy.*, Indo Am. J. P. Sci, 2018; 05(10).

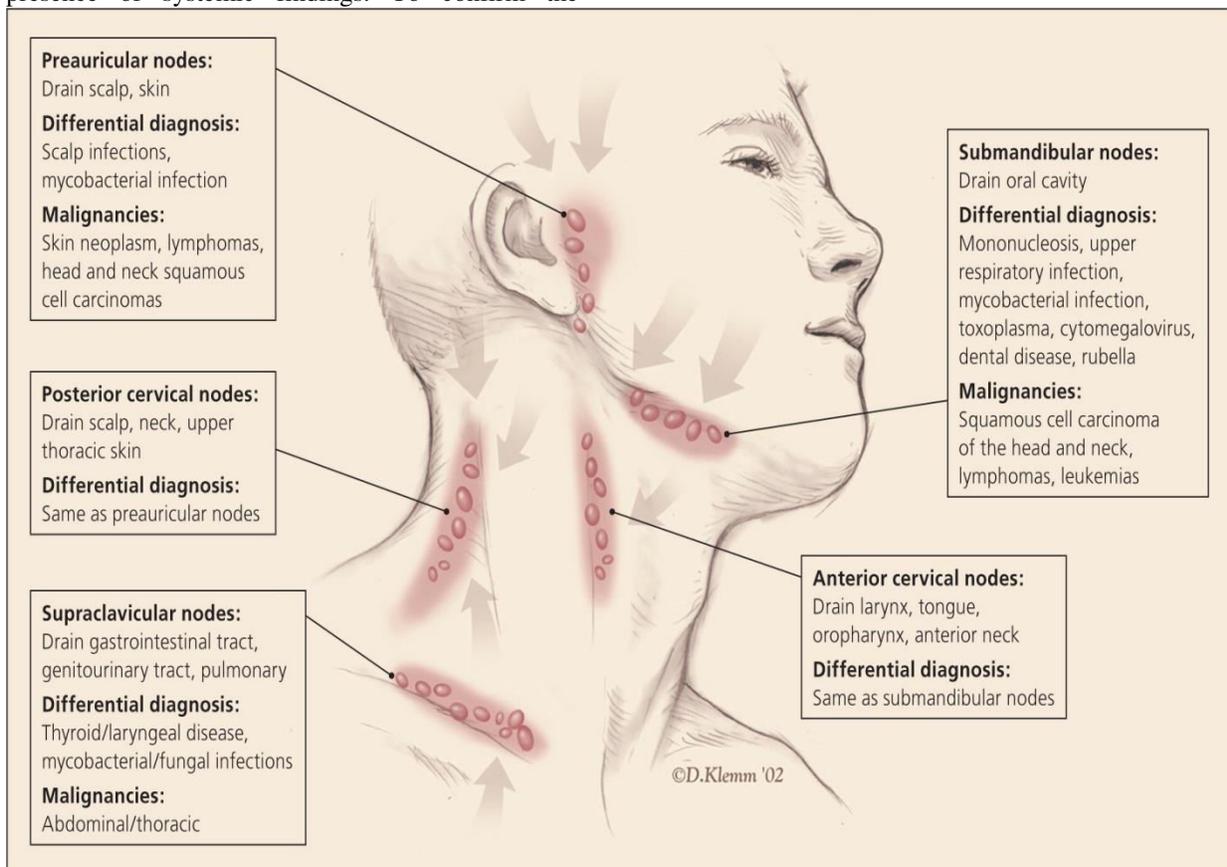
INTRODUCTION:

Lymph nodes constitute an important part of the body's immune mechanism. Cervical lymphadenopathy may be a feature of various disorders, both inflammatory and neoplastic. In most cases, cervical lymphatic adenopathy is benign inflammation in nature. Tuberculosis is the most common cause of subacute or chronic cervical lymphatic adenopathy in developing countries. Tuberculosis is one of the most common causes of peripheral lymphatic adenopathy in most countries in Asia and Africa, with a variable frequency of 43-56%. Tuberculous lymphatic adenitis occurred mainly in individuals born abroad 5 years after arrival in the US. U. Cervical lymph adenopathy is usually defined as cervical lymph. Nodal tissue with a diameter of more than 1 cm. This common surgical problem is frequently seen in the surgical patient group. Various etiological aspects are seen worldwide. In the differential diagnosis, it is important to observe cervical lymphatic adenopathy in the context of other clinical features such as age, sex, involvement of another lymph node group and presence of systemic findings. To confirm the

histopathological diagnosis, excisional biopsy should be performed on the largest and most robust node that can be palpable and the knot removed securely with the capsule.

MATERIALS AND METHODS:

This descriptive study was held for one year duration from June 2017 to June 2018 in the Department of Surgery Unit II of Jinnah Hospital, Lahore. This is a kind of explanatory work. All cases of cervical lymphatic adenopathy admitted to the outpatient clinic were included. No solid age, gender or race criteria were determined. A detailed history and physical examination were performed. When the lymph nodes were examined, the presence of number, number, whether matt or discrete, sensitivity, mobility, consistency and ripple were included. Basic research included complete blood count and ESR, Mantoux test, and chest x-ray. Excision biopsy was performed in all cases and the diagnosis of tuberculosis was confirmed by epithelioid granulomas and caseous necrosis on histopathological examination.



RESULTS:

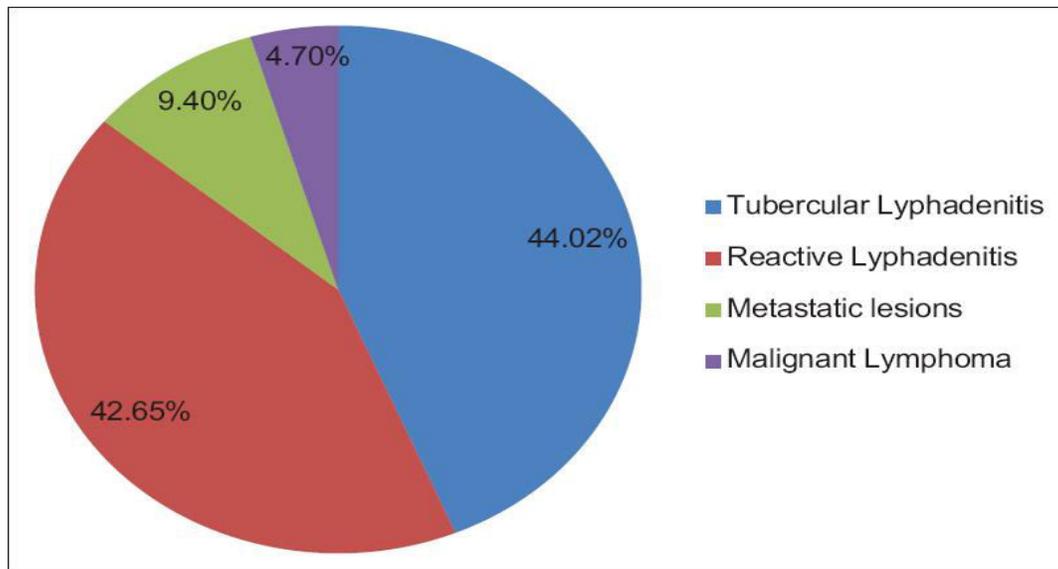
The study included a total of 85 patients, including 63 female and 22 male patients. The maximum patients were 21 to 30 years and 11 to 20 years. The smallest patient was 13 years old and the oldest was 67 years old. The duration of cervical inflammation varies from a minimum of 3 weeks to 14 months. Thirty-one patients (36.5%) were admitted two to three months after the onset of swelling. Sixteen patients (18.8%) applied for the first symptom in the following month. Seventy-two patients (84.7%) were combined with multiple cervical lymph nodes and 70%. Thirteen patients (15.3%) were only swollen. Lymphatic adenopathy was present in 14% of the cases. Six patients (7.05%) were axillary, 4 patients (4.70%) were axillary and inguinal and 2 patients (2.35%) were inguinal. Weight loss (71.7%), fever

(29.4%) and pain (15.2%) were found in all patients with cervical lymphatic adenopathy. Only 22.4% of the patients showed swelling only. Thirty-six patients (55.4%) were diagnosed with tuberculosis cervical lymphadenitis and two patients (100%) had secondary metastases with low hemoglobin. ESR increased in 47.7% of patients with TB and secondary metastatic lymph node (100%). Chest radiography showed definite results in 20% of tuberculosis cases. Excision biopsy was performed in all available study cases. Histopathology showed that 65 (76.5%) had tuberculosis, 13 (15.3%) had non-lymphatic adenopathies and 3 (3.3%) had lymphoma. Two cases (2.4%) were diagnosed as metastatic carcinoma. Two cases (2.4%) showed acute lymphadenitis.

Tuberculous Cervical Adenitis

- The Bacillus reaches the lymph node by direct drainage or haematogenous spread
- The incidence of co-existing TB is less than 5 %
- 50 % of the excised tonsils showed evidence of TB





DISCUSSION:

Tuberculosis is observed in almost every way in our surgery clinic. Peripheral lymphatic adenopathy is considered to be the most common form of extrapulmonary tuberculosis. The prevalence of extrapulmonary tuberculosis in Pakistan is unknown, but is based on data from other developing countries; A significant proportion of TB cases are likely to be extrapulmonary. Some previous studies have shown high rates of tuberculous lymphatic adenitis in Pakistan, India and Bangladesh. The study by Daupat showed tuberculosis in 51% of the cases. In this study, tuberculosis was found to be compatible with these studies in 55.4% of cases. The incidence is lower than 69% of cases observed in a local study. Cervical lymphatic adenopathy is a common clinical presentation in surgical clinics.

In cases with cervical lymphatic adenopathy, in most cases the diagnosis has been proven to be tuberculosis in this part of the world. This is supported by several studies conducted in Pakistan. The presentation is usually in the form of single dilation or multiple lymph nodes mixed together. The tuberculosis process is limited to clinically affected lymph nodes in 80% of the cases, but the primary focus in the lung should always be suspected and investigated. Non-specific lymphatic adenitis was found in 15.3% of the patients with similar results in other studies. In this study, 3.5% of the patients with lymphoma were diagnosed with Hodgkin lymphoma. In two cases, metastatic carcinoma (2.2%) was found, which was lower than other studies performed elsewhere. The main focus was found in nasopharynx, stomach and testes.

CONCLUSION:

Cervical lymphatic adenopathy is a common clinical problem. Most of the patients presented with tuberculosis lymphatic adenitis. Detailed histological examination and reference examinations completed with excision biopsy for histopathology is sufficient to diagnose the etiology of cervical lymphatic adenopathy. Preventive measures, such as good hygiene, patient and family education, may support early diagnosis. Rapid diagnosis and specific treatment may give better results.

REFERENCES:

1. Bernardes Filho, Fred, Isabela Sgarbi, Santos Flávia da Silva Domingos, Rafael Cruz Rios Sampaio, Rodolfo Mendes Queiroz, Sílvia Nunes Szente Fonseca, Roderick James Hay, and Loan Towersey. "Acute paracoccidioidomycosis with duodenal and
2. Júnior, Marcos Rosa, Isabella Vargas Baldon, André Felipe Candeas Amorim, Ana Paula Alves Fonseca, Richard Volpato, Rafael B. Lourenço, Rodrigo Melo Baptista, Ricardo Andrade Fernandes de Mello, Paulo Peçanha, and Aloísio Falqueto. "Imaging paracoccidioidomycosis: A pictorial review from head to toe." *European journal of radiology* 103 (2018): 147-162.
3. Giusiano, Gustavo, Clarisa Aguirre, Claudia Vratnica, Florencia Rojas, Teresa Corallo, María Emilia Cattana, Mariana Fernández, Javier Mussin, and María de los Angeles Sosa. "Emergence of acute/subacute infant-juvenile paracoccidioidomycosis in Northeast Argentina: Effect of climatic and anthropogenic

- changes?." *Medical mycology*(2018).
4. Mazzitelli, M., Lamberti, A.G., Quirino, A., Marascio, N., Barreca, G.S., Costa, C., Pisani, V., Strazzulla, A., Greco, G., Liberto, M.C. and Focà, A., 2018. Utility of Molecular Identification and Quantitation of Species with Species-Specific Real-Time PCR for Monitoring Treatment Response: A Case Series. *The Open Microbiology Journal*, 12(1).
 5. Zhang, Bin, Feng Tao, and Hao Zhang. "Metastasis-associated protein 2 promotes the metastasis of non-small cell lung carcinoma by regulating the ERK/AKT and VEGF signaling pathways." *Molecular medicine reports* 17, no. 4 (2018): 4899-4908.
 6. Koliarakis, Ioannis, Anna Psaroulaki, Taxiarchis Konstantinos Nikolouzakis, Manolis Kokkinakis, Markos N. Sgantzios, George Goulielmos, Vasilis P. Androutsopoulos, Aristides Tsatsakis, and John Tsiaoussis. "Intestinal microbiota and colorectal cancer: a new aspect of research." *JOURNAL OF BUON* 23, no. 5 (2018): 1216-1234.
 7. Williamson, D.R., Dewan, K.K., Patel, T., Wastella, C.M., Ning, G. and Kirimanjeswara, G.S., 2018. A single mechanosensitive channel protects *Francisella tularensis* subsp. *holarctica* from hypoosmotic shock and promotes survival in the aquatic environment. *Applied and environmental microbiology*, 84(5), pp.e02203-17.
 8. Silva Jr, José VJ, Louisa F. Ludwig-Begall, Edmilson F. de Oliveira-Filho, Renato AS Oliveira, Ricardo Durães-Carvalho, Thaísa RR Lopes, Daisy EA Silva, and Laura HVG Gil. "A scoping review of Chikungunya virus infection: epidemiology, clinical characteristics, viral co-circulation complications, and control." *Acta tropica* (2018).
 9. Díaz-Delgado, J., Fernández, A., Sierra, E., Sacchini, S., Andrada, M., Vela, A.I., Quesada-Canales, Ó., Paz, Y., Zucca, D., Groch, K. and Arbelo, M., 2018. Pathologic findings and causes of death of stranded cetaceans in the Canary Islands (2006-2012). *PloS one*, 13(10), p.e0204444.
 10. Nikolov, S., Blackwell, S., Mendes, R., De Fauw, J., Meyer, C., Hughes, C., Askham, H., Romera-Paredes, B., Karthikesalingam, A., Chu, C. and Carnell, D., 2018. Deep learning to achieve clinically applicable segmentation of head and neck anatomy for radiotherapy. *arXiv preprint arXiv:1809.04430*.
 11. Lazar, Veronica, Lia_mara Ditu, Gratiela Pircalabioru, Irina Gheorghe, Carmen Curutiu, Alina Maria Holban, and Carmen Mariana Chifiriuc. "Aspects of gut microbiota and immune system interactions in infectious diseases, immunopathology and cancer." *Frontiers in immunology* 9 (2018): 1830.
 12. Zielińska, Sylwia, Anna Jezierska-Domaradzka, Magdalena Wójciak-Kosior, Ireneusz Sowa, Adam Junka, and Adam M. Matkowski. "Greater Celandine's Ups and Downs– 21 Centuries of Medicinal Uses of *Chelidonium majus* From the Viewpoint of Today's Pharmacology." *Frontiers in pharmacology* 9 (2018): 299.
 13. Secombe, Kate R., Janet K. Coller, Rachel J. Gibson, Hannah R. Wardill, and Joanne M. Bowen. "The bidirectional interaction of the gut microbiome and the innate immune system: implications for chemotherapy-induced gastrointestinal toxicity." *International journal of cancer* (2018).
 14. Miller, Ian C., Marielena Gamboa Castro, Joe Maenza, Jason P. Weis, and Gabriel A. Kwong. "Remote control of mammalian cells with heat-triggered gene switches and photothermal pulse trains." *ACS synthetic biology* 7, no. 4 (2018): 1167-1173.
 15. Romha, Gebremedhin, Gebreyohans Gebru, Abrha Asefa, and Gezahegne Mamo. "Epidemiology of *Mycobacterium bovis* and *Mycobacterium tuberculosis* in Animals: Transmission Dynamics and Control Challenges of zoonotic TB in Ethiopia." *Preventive veterinary medicine* (2018).