

Case Report

## Cervical Lymphadenopathy in Occupational Hazards - A Case Report

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### ABSTRACT

Cervical lymphadenopathy refers to lymphadenopathy of the cervical lymph nodes. It is a sign or a symptom, not a diagnosis. Cervical lymph node swelling can be a reliable indicator of infection or other inflammation in the area. It may also indicate cancer, but this is far less common. The condition most commonly represents a transient response to a benign local or generalized infection. A case of a 35 -year-old male with a history of neck swellings is presented. The swellings had been of 6-month duration. The lymph nodes were excised and were confirmed histopathologically as Reactive lymphadenopathy with unremarkable salivary gland. Clinical progress was uneventful and post-operative recovery was excellent without recurrence.

**Keywords:** Cervical lymphadenopathy, Occupational hazards, lymphadenitis

### INTRODUCTION

Lymph nodes are oval-shaped organs of immune system, distributed throughout the body and linked by lymphatic vessels. The body has about 600 lymph nodes of which approximately 60-70 nodes are situated in the head and neck region. [1] Lymphadenopathy is a common clinical finding in a patient seeking oral health care. It may be in a localized, limited, or generalized form. Malignancies, infections, autoimmune disorders, iatrogenic, and other miscellaneous conditions are considered as the causes for cervical lymphadenopathy. [2] Unexplained cervical lymphadenopathy is a cause of concern for physician and patient because sometimes it could be the manifestation of an underlying malignancy.

Cervical lymphadenopathy refers to lymphadenopathy of the cervical lymph nodes (the glands in the neck). It is a sign or a symptom, not a diagnosis. Cervical lymph node swelling can be a reliable indicator of infection or other inflammation in the area. [3] It may also indicate cancer, but this is far less common. The condition most commonly represents a transient response to a benign local or generalized infection. Acute bilateral cervical lymphadenitis is usually caused by a viral upper respiratory tract infection or streptococcal pharyngitis. [4] Acute unilateral cervical lymphadenitis is caused by streptococcal or staphylococcal infection in 40% to 80% of cases. Generalized lymphadenopathy is often caused by a viral infection, and less frequently by malignancies, collagen

vascular diseases, and medications. In Cervical lymphadenopathy is cervical lymph nodal tissue measuring more than 1 cm in diameter. [5] The history and physical examination alone usually identify the cause of lymphadenopathy. When the cause is unknown, lymphadenopathy should be classified as localized or generalized. Patients with localized lymphadenopathy should be evaluated for etiologies typically associated with the region involved according to lymphatic drainage patterns. Generalized lymphadenopathy, defined as two or more involved regions, often indicates underlying systemic disease. [6] Risk factors for malignancy include age older than 40 years, male sex, white race, supraclavicular location of the nodes, and presence of systemic symptoms such as fever, night sweats, and unexplained weight loss. Thus, a patient reporting with palpable lymph node in the neck is a serious diagnostic and therapeutic problem. In most of the cases, lack of appropriate examination and investigation result in delay in correct diagnosis and may result in iatrogenic complication due to improper diagnosis. [7] Here, we are reporting a case of cervical lymphadenopathy with unknown cause presented only as cervical lymphadenopathy and diagnosis is made by an extensive investigative work up. Sometimes, cervical lymphadenopathy may be the result of some occupational hazards condition as in our case.

### CASE REPORT

A 35-year-male patient reported to our Institution with a 6 month old swelling on the left side of neck. He was a worker in paint factory. The lesion was initially diagnosed as lymphadenitis when he first sought for treatment a year ago. The swelling was initially small and gradually attained the present size. When the patient reported to us, he was afebrile. The swelling was non-tender, firm in consistency and freely mobile from underlying tissues. Clinically there was no odontogenic source

of infection which was confirmed radiographically

There was no other significant past medical history. His physical examination was significant His neck exam showed lymph nodes, on the left side of the neck, which were mobile and tender, the largest of which measured and 3.4x 1.2 cm. There were no other lymph nodes palpated elsewhere in the body. His throat examination was normal with no pharyngitis or tonsillitis or tonsillar hypertrophy. His cardiovascular, respiratory, and per abdomen exams were likewise normal. Patient's routine blood investigations including ESR were done .He had normal electrolytes, liver function tests, and renal function tests. His chest x-ray was reportedly normal. USG of neck showed evidence of multiple enlarged conglomerate necrotic lymph nodes in the left cervical and supraclavicular region. The larger lymph node measuring 3.4×1.2 cm in the left level III .Excision of the lymph node was done through curvilinear incision placed 1 cm below the swelling. Blunt dissection was done to explore the lining followed by excision of the enlarged lymph nodes. Thorough debridement was done(fig 2 and 3). The wound was closed in layers. The patient was well post operatively and was placed on yearly follow ups.



Figure 1. Swelling in the of neck



Figure 2. Planned incision for excision of lymph nodes

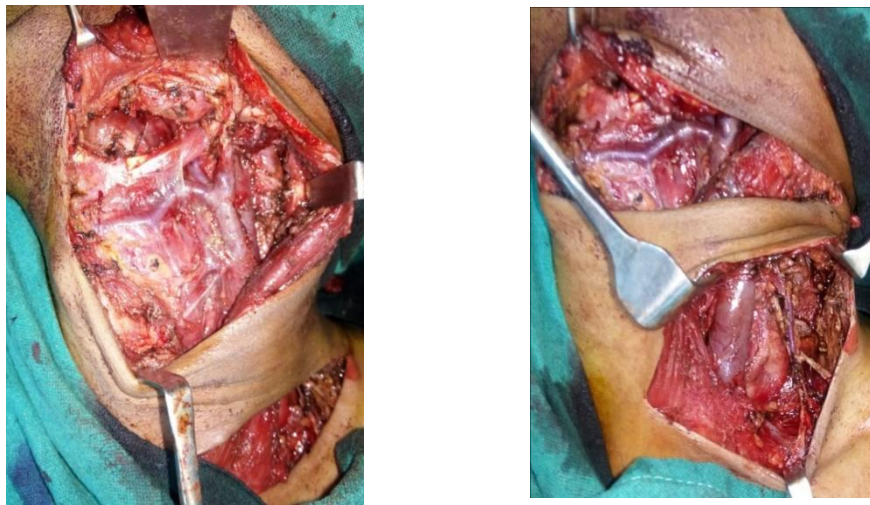


Figure 3. Exposure of afflicted lymph nodes

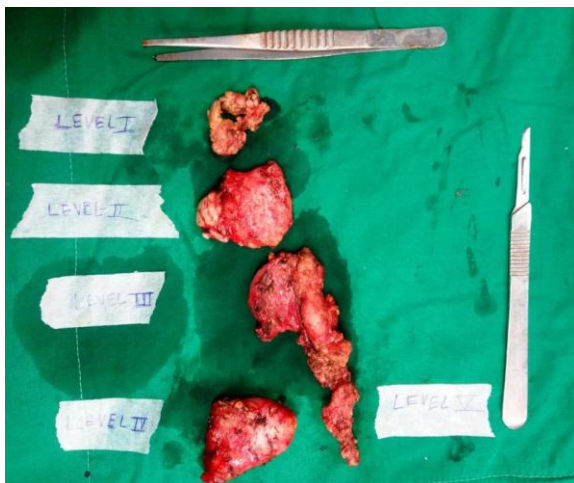


Figure 4: The excised specimen

## DISCUSSION

Cervical lymphadenopathy is a strikingly common occurrence; estimates vary, but the incidence of lymphadenopathy in the population ranges from 62% in patients aged 3 weeks to 6 months to 41% in those 2 to 5 years old to upwards of 90% of

all children 4 to 8 years old. In our case swelling of cervical lymph nodes was present in the lateral region of neck. In precise histologic considerations, occurrence of cervical lymphadenopathy with unknown cause in the neck is extremely rare.

In our case, initially it was diagnosed as lymphadenitis. They usually present as slow growing swelling which is painless. The cervical lymphadenopathy may appear at any stage of life, and hence the right time for operation is when they manifest with signs and symptoms. In our case FNAC and USG played an important role in diagnosis as they defined the dimensions and histopathologic parameters of the swelling. Another disease that has similar presentation is the Kikuchi-Fujimoto disease. It has features of cervical histiocytic lymphadenitis, fatigue and fever. However, the disease has a female



predilection and is more commonly seen in the Mongolian races. [8] From our observation of the case, it can be suggested that the occupation of the patient which exposed him to inhalation of harmful aerosols, might have triggered the inflammatory process in the cervical lymph nodes.

## CONCLUSION

Cervical lymphadenopathy is a common and usually benign finding in adult. In most cases, it is infectious in origin secondary to a viral upper respiratory tract infection. A good history and thorough physical examination are usually all that is necessary to establish a diagnosis. Most of case with cervical lymphadenopathy require no specific treatment, but do need follow-up in 2 to 4 weeks. Cervical lymphadenopathy with unknown cause is pathologic entities that occur rarely in the neck. The unusual presentation increases the diagnostic dilemma manifolds. Hence, when considering cervical lymphadenitis of unknown origin, occupational hazard must also be borne in mind as a possible etiology.

**Informed Consent:** Informed consent was obtained from the patient as standard protocol.

**Conflict Of Interest:** Authors have declared that there is no conflict of interest.

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