



Case Report on Lymphadenopathy

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ABSTRACT

Introduction: The zoonotic vector-borne disease Visceral Leishmaniasis (VL) is caused by the Leishmania donovani protozoa complex (L donovani and Leishmania infantum). VL is endemic in wide parts of the tropics, subtropics, and Mediterranean basin, and it can infect visitors returning from those places. A spectrum of clinical symptoms ranging from asymptomatic to catastrophic visceral infections is influenced by the intricate parasite-host interactions that predispose some individuals to developing the disease or suppressing the infection. In this example, VL manifested as an isolated cervical lymphadenopathy in an immunocompetent patient.

Clinical Findings : Swollen neck region, pain in neck, fever, breathing difficulty, Hb(15.8%).

Diagnostic Evaluation: Hb - 15.8 %, MCHC- 34.2, MCV 75.3, MCH-25. 7, Total RBC count- 6.13

Total WBC count- 1000 , HCT-46. 1,

Total platelet count- 2.97, Monocytes 4 Granulocytes - 70, Lymphocyte- 25 , RDW 14.4

Eosinophilus -1 Basophilus- 0

Coagulation Profile - APTT - patient 30.20

Prothombin time - patient 15.20

Therapeutic interventions: Injaugmentin 1.2 gm BD , Tab Rabemac 20 mg BD , Tab ZerodolSp BD , Tab chymodol fort TDS, Tab Allegra m OD, Tab limcee 500 mg OD, N/D Otrivin 2° TDS, Betadine Gargle TDS, Steam inhalation TDS, Intubation SOS, InjNeomol TDS.

Outcome: After treatment the boy was showing the improvement. His fever and pain were relieved .

Conclusion: My patient is admitted in AVBRH male medicine ward no-24, 25 with case of lymphadenopathy and he had complaint of swallow in neck region, pain in neck region and fever. After getting proper treatment his condition was improved.

Keyword: Leishmaniasis, Lymphadenopathy, Amphotericin B, Diagnostic.

Introduction:

Lymphadenopathy is also known as adenopathy which means enlargement and the disease condition of lymph nodes. It is a abnormal size of lymph nodes. Lymphadenopathy having a inflammatory most common type is lymphadenitis. Lymphadenitis are producing swollen Or increase in size of lymph nodes. Inflammation of lymphatic vessel is called as lymphangitis.^{1,2} Enlargement of a lymph nodes is a sometime sign of that your immune system fight against the infection and foreign particles. Lymph nodes are usually located in side of neck. The lymph nodes probably feel soft and tender when we touch and may feel little hurt. Enlargement of lymph nodes are common and are a good thing. The swelling sizes of lymph nodes are like pea or bean in size lymph nodes are one of the natural reaction of a human body to illness or infection. The swallow gland acts like a filter of body that help to get free from germs cells and other foreign particle or matter that are passes through the passage of lymph with the help of lymph fluid. The clear or slightly yellowish lymph fluid made up of WBC , protein and fats. Swollen lymph nodes or gland it not means that the swallow of neck but the lymph nodes is in the region groin under the chin and under the arm are also swallow too.^{4,5} Lymph nodes are spread in all over body but we can't feel it but they are

present. There lymph network of about 600 of them your jaw, chest, arms, abdomen and leg.^{6,7} Lymph nodes infection that cause by bacteria a virus or a fungus. It is important to know how the infection into the lymph nodes in the body so that can help to give a right treatment. Lymphadenitis can be one of two types: one of the localized lymphadenitis is a most common type. It involve one or just few nodes are closed to the area that already having infection for example swollen of node cause of tonsil infection. Other is a generalize lymphadenitis :this type of lymph nodes infection occur in a two or more lymph nodes group caused by the infection blood stream or another type of illness that are affect the whole body.^{8,9,10}

Patient information:

Patient Identification : Mr. Shankar Rajusakat from Yavatmal the age of 19 years old admitted in male medicine ward in AVBRH on 12th November 2021 with a known case of lymphadenopathy. He is 50 kg weight and his height is 162 cm .

Present medical history: Mr. Shankar Rajusakat the age of 19 years old admitted in male medicine ward AVBRH by his parents with a chief complaint of breathing difficulty since 10 days, cough, swelling over the lower part of neck since 3 days, pain on swallow part .On doctor assessment patient was apparently all right 15 days back when he started swelling over right side of neck which was sudden onset .patient also complaint that loss of appetite ,fever since 10 days and pain in region of swallow, headache ,nausea, vomiting, nasal obstruction and bleeding .

Past medical history: Patient was diagnosed to have lymphadenopathy at the age of 19 years old when he was admitted in hospital due to swallow neck .Before the patient was taken to private hospital in Yavatmal on 11 November 2023 for a same complaint and was treated with : IVF, analgesic, antacid and further management .

Family history : There are 4 member of family .No any hereditary disease in his family .All are healthy except my patient .There are no any contagious disease such as dengue ,corona virus, flu ,AIDS ,HIV and no any other sexual transmitted disease.

Past intervention and outcomes :My patient was diagnosed with lymphadenopathy when he was 19 years old taken to treatment from private hospital at Yavatmal on 11 November 2021 and he was treated with medicine of analgesic and antacid and IVF. It was found effective as a patient does not develop complications till then.

Clinical Findings: Swallow neck region pain in neck, fever, breathing difficulty, Hb (15.8%),

Etiology: Lymph node enlargements are commonly caused by infection auto immune or malignant disease, histiocytosis, and storage diseases, benign hyperplasia ad drug reaction. Autoimmune disease such as rheumatoid arthritis or lupus, cancer and sarcoidosis.

Physical Examination:

There is not much abnormality found in head to foot examination the patient is lean and thin and having dull look he is weak and not so cooperative. In inspection see the swelling of the neck region it is palpable by hand.

Diagnostic Evaluation:

- Hb - 15.8 %, MCHC- 34.2, MCV 75.3, MCH-25. 7, Total RBC count- 6.13
- Total WBC count- 1000, HCT-46. 1,
- Total platelet count- 2.97, Monocytes 4 Granulicytes - 70, Lymphocyte- 25, RDW 14.4
- Eosinophilus -1 Basinophilus- 0
- Coagulation Profile - APTT - patient 30.20
- Prothombin time - patient 15.20

Therapeutic Interventions:

Medication	Dose	Frequency
Injaugmentin	BD	1.2 gm
Tab Rabemac	BD	20 mg
Tab ZerodolSp	BD	
Tab chymodol fort	TDS	
Tab Allegra m	OD	
Tab limcee	OD	500 mg
N/D Otrivin	TDS	

Betadine Gargle	TDS	
Steam inhalation	TDS	
Intubation	SOS	
InjNeomol	TDS	

Discussion:

Lymphadenopathy it means the swollen of lymph nodes. There are located in the whole body. If the lymph nodes are swollen only in one area of the body called as localized swollen lymph node. If the enlargement of lymph node caused by virus, in most of case they don't need treatment, but on time period gradually shrink back in normal lymph size.^{8,9,10}

If the lymph nodes are swollen in the two and more area of body that means it is a more serious systemic disease such as sexual transmitted disease, cancer, autoimmune disease etc. This disease condition required longer duration of treatment.^{11,12,13}

Swollen lymph node feels like sore and tender. Most common site of lymphadenopathy is neck is an upper respiratory infection. Some of the bacteria and virus cause swelling of lymph node such as cold and flu, skin infection, streptococcal infection in throat and mononucleosis. When blood cell fight off an invading infection, that's why lymph node gets larger.^{18,19,20}

Conclusion:

Localized lymph node enlargement due to leishmaniasis should be considered in the differential diagnosis of lymphadenopathy of unknown origin in patients who have visited or stayed in leishmaniasis-endemic areas such as the Mediterranean basin, even if it was a long time ago and for a short time. The lymphadenopathy could be diagnosed using fine-needle aspiration cytology and/or PCR for *Leishmania* sp. A low-dose liposomal Amphotericin B treatment could be effective, and it's worth investigating further.

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