ISSN No: 2582-0559

A REVIEW ARTICLE

CERVICAL LYMPHADENOPATHIES- A REVIEW

Dr.Fasla.P.P, Dr.Nilofer Halim, Dr.Arshad Ali

Department of Oral medicine and Radiology, Kerala University of Health Sciences, India.

DOI: 10.37841/jidam_2022_V9_I4_04

Address for Correspondence

Dr. Fasla.P.P. Department of Oral medicine and Radiology, Kerala University of Health Sciences, India.

Email id- faslapachu7@gmail.com

Received:12.12.22 **First Published: 22.12.22**

Accepted:20.12.22 **Published: 17.12.22**

ABSTRACT

Cervical lymphadenopathy is the swelling of the lymph nodes in the cervical region. It can be localized or generalised, depending on the involvement of other lymph nodes. The cause can be diagnosed by history taking, clinical examination, and various laboratory tests. Causes include infection, malignancy, autoimmune disease and rare diseases. Biopsy can be done to rule out malignancy. If it is due to malignancy, check for any metastatic lesions which can be done by CT scan.

KEYWORDS: Lymphadenitis, nodes, swelling

ISSN No: 2582-0559

INTRODUCTION

The lymphatic system consists of a collection of lymphatic vessels connected to lymphatic node which filter lymph fluid that gets collected throughout the body[12].Lymph nodes are present throughout the body. The head and neck region contains over 300 lymph nodes. It contains lymphocytes and works to protect the body against microbes, maintain adequate fluid levels, absorb nutrients, and remove certain waste products[3].

Definition

Cervical lymphadenopathy refers to the swelling of lymph nodes located in the neck[4]. Lymphadenopathy is classified as localised or generalised lymphadenopathy[1].Localized lymphadenopathy should be evaluated with etiologies typically associated with the region that is involved according to lymphatic drainage system. When more than one area of lymph nodes is swollen it is called generalised lymphadenopathy. Some infections, certain medicines, immune system diseases and cancers like leukemia and lymphoma can cause this kind of swelling. Lymph node swelling is often caused by something other than cancer.

Classification of lymph nodes:-

1.Level IA:-Submandibular lymph nodes, Level IB:-Sub mental lymph nodes.

2.Level II:- Upper internal jugular lymph nodes.

3.Level III:-Middle jugular lymph nodes.

4.Level IV:-Lower jugular lymph nodes.

5.Level V:- Posterior triangle.

6.Level VI:-Central compartment.

7.Level VII:-Superior mediastinal nodes[6].

Classification of lymph nodes:-

1.Level IA:-Submandibular lymph nodes, Level IB:-Sub mental lymph nodes.

2.Level II:- Upper internal jugular lymph nodes.

3.Level III:-Middle jugular lymph nodes.

4.Level IV:-Lower jugular lymph nodes.

5.Level V:- Posterior triangle.

6.Level VI:-Central compartment.

7.Level VII:-Superior mediastinal nodes[6].

Causes of lymphadenopathies:-

1.Infection.

2.Malignancies.

3.Autoimmune diseases.

4.Rare diseases[2].

Diagnosis:-

Physical examination:-

When infection is localized, the clinician must evaluate the region of drainage of the involved lymph node for evidence of infections, skin lesions or tumours. Other nodal sites should also be examined to exclude the possibility of generalised rather than localized lymphadenopathy. Careful palpation of sub mental, submandibular, anterior and Posterior cervical,jugulo-omohyoid and jugulodigastric lymph nodes to detect whether they are fixed or mobile, number of nodes, fixation to tissues or not, presence of pain or not and the temperature at the site.

1. INFECTIONS:-

Physical signs:-Fever, pain[7].

CBC reports:-

WBC is higher than normal.

In acute infection (bacterial), stress and pregnancy, neutrophils are elevated.

In viral infections, lymphocytes are mainly targeted (increased) [7].

Monocytes are increased in tuberculosis, chronic inflammatory disease.

Eosinophil's are increased in allergic reactions and parasitic infections.

FNAC and culture also aids in diagnosis of type of infection.

Eg: Infectiousmononucleosis,HIV,Cellulitis,measles.

2.MALIGNANCIES:-

Physical signs:-No pain, loss of weight fatigue.

Rapid increase in size of cervical lymph nodes[8].

CBC report:-

RBCs and platelets are lower than normal counts.

Higher counts of WBC (100,000-4,00,000).

Tumour markers, CA125 test, CT scan, MRI, Ultrasound, biopsy also helps in detection of malignancies and their metastasis.

Eg:-Lymphoma, leukemia.

3. AUTOIMMUNE DISORDERS:-

Physical signs:-Fatigue, skin rashes, numbness and tingling in the hands and feet.

CBC report:-

Increase in WBC.

Antinuclear antibody test (ANA) helps in diagnosis of autoimmune disorders.

Eg:-SLE,Rheumatoid arthritis,Sjogrens syndromes.

4. RARE DISEASES:-

Castleman disease is a disorder that involves an overgrowth of cells.

Kikuchi's-Fujimoto disease[9].

Rosai-Deforman disease[10].

Most of the lymphadenopathy are self-limited and require no treatment, but certain lymphadenopathy may be due to malignancy and require definitive diagnosis which include FNAC, biopsy. An astute clinician should be able to correlate the clinical features with the lymph node examination and advice biopsy when necessary.

FUNDING:
No funding

DISCLOSURE OF INTEREST:
The authors declare that they have no competing interests.

REFERENCES

1.Lymphadenopathy:Differential Diagnosis and Evaluation-Robert Ferrer.

2.Cervical lymphadenopathy:Unwinding the hidden truth-Athira Aruna Ramadas,Renault Jose,Marina Lazar Chandy,Dental research journal.

3.Anatomy,Head and Neck,Supraclavicular lymph node book-Banjar FK,Wilson AM.

4.Cervical lymphadenopathy-Benisha Julian,Osmosis from Elsevier.

5.Unexplained lymphadenopathy:Evaluation and Differential Diagnosis-Heidi L.Gaddy,Angela M.Reigel.

6.American joint Committee on Cancer(AJCC),Chicago,Illinois.AJCC Cancer Staging Manual,7th edition (2010) published by Springer New York,Inc.

7.Pediatrics Cervical lymphadinitis-Alexander.K.C.Leung,Sarika Khanna.

8. https://www.mayoclinic.org/diseases-conditions/swollen-lymph-nodes/symptoms-causes/syc-20353902.

9.Kikuchi-Fujimoto disease(histiocytic necrotizing lymphadenitis):report of a case with other autoimmune manifestations-Tina Mahajan,Richard C.Merriman,and Marvin J.Stone.

10.Rosai Dorfman disease-Juan Rosai-National Organisation for Rare Disorders.