Original Research Paper

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General Surgery

EVALUATION OF CERVICAL LYMPHADENOPATHY

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ABSTRACT **Introduction** Cervical lymphadenopathy is a common problem faced by physicians and surgeons. Lymphadenopathy is an index of spread of infection and malignancy. In cervical lymphadenopathy,the most likely diagnosis are probably Tuberculosis and Hodgkins disease and Malignancy. **Objectives** Our aim is to study etiology of cervical lymphadenopathy and to study clinical presentation. **Methods** The study was conducted in viswabharathi general hospital, connected to viswabharathi medical college, penchikalapadu, Kurnool. A detailed clinical history taken and clinical examination is carried out. All patients underwent routine blood investigations, FNAC and Radiological examination followed by Biopsy. **Results** The maximum incidence is found to be of tuberculosis, which is followed by secondaries 16%, Hodgkins 6%, Non Hodgkins lymphoma 4%. The maximum incidence of tuberculosis is found to be between the ages of 11-30 years i.e; 56%. In secondaries, maximum incidence is found to be 31-50 years i.e; 14%. Female to male ratio is 2.5:1. Digastric group is found to be affected in maximum cases 42%. The presenting complaint is swelling in 100% ,consistency is firm 78% and matting is found in 60% of cases. **Conclusion** Of the 50 cases, Tuberculosis has the maximum incidence (75%) followed by secondaries (16%). Between 11-30 years, tuberculosis has the maximum incidence and between 41–50 years metastatic disease has the maximum followed by hodgkins. All the patients has cervical lymphadenopathy (100%) and 50% has pain and fever (36%). The cheapest and most reliable method of diagnosis is fine needle aspiration cytology(FNAC). In investigations FNAC is found to 90% accurate for diagnosis of tuberculosis,metastatic and hodgkins disease.

KEYWORDS : Cervical Lymphadenopathy; Tuberculosis; FNAC.

INTRODUCTION:

The human body has about 600-800 lymph nodes which play the role of filtering the lymph fluid as it circulates throughout the body. The prime function of lymph node is to deal with antigen, which can be of any form. The lymph nodes contain T and B cells along with Antigen Presenting Cells which are called the dendritic cells. They form the part of the immune system and function to fight off disease and infections.[4,5,6.] Lymphadenopathy (LAP) refers to the lymph nodes that are abnormal in size (usually greater than 1 cm) consistency or number.[6,7] In general, there are two mechanisms of lymphadenopathy hyperplasia and infiltration. Lymphadenitis is the pathologic term for inflammation of the lymph nodes.[1] out of 800 lymphnodes nearly 300 are located with in the neck. Lymphadenopathy is broadly classified into localized, generalized, and dermatopathic. According to its duration, it can be acute (2 weeks duration), subacute (4–6 weeks duration) and chronic (does not resolve by 6 weeks duration).[2,3] Cervical lymphadenopathy is quite significant in that there are numerous etiological agents and is an index of spread of infection and malignancy.[6]When cervical lymphadenopathy is detected, a cause can sometimes be determined by careful medical history, thorough physical examination, judicious selection of laboratory tests and, if necessary, a lymph node biopsy.

The microscopic interpretation of abnormal lymphnode is extremely difficult. Of many causes for cervical lymphadenopathy,tuberculosis is still a common cause for lymphadenitis. In generalized lymphadenopathy, the most likely diagnosis are probably tuberculosis and hodgkins disease.

OBJECTIVES:

- To study the etiology of cervical lymphadenopathy.
- To study the various clinical presentation of cervical lymphadenopathy.
- To study the clinical course of cervical lymphadenopathy.

METHODOLOGY:

MATERIALS:

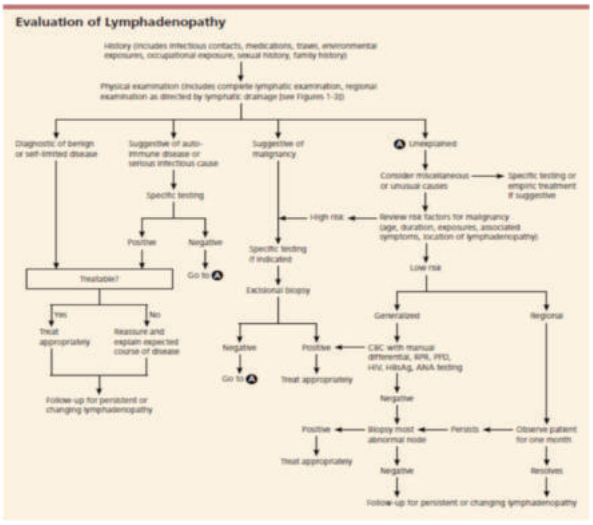
The clinical material consists of patient randomly selected with history of cervical lymphadenopathy, who came to surgical opd viswabharathi general hospital, Kurnool between December 2022-may 2023; patients are selected randomly and sample size is 50.

METHODS:

A detailed case history taking, clinical examination for the patient and investigations are done such as fine needle aspiration cytology (FNAC), routine blood examination, radiological investigation and biopsy is done.

DISCUSSION:

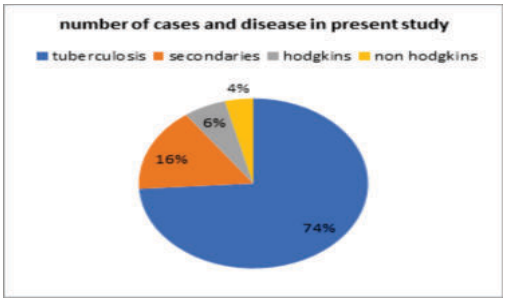
The neck region contains around 300 lymph nodes (LNs) out of 800 LNs in the whole body. The detailed study of LNs by Rouviere in 1932 and the later illustration of metastatic predilection of head and neck malignancies to certain LN regions by Lindberg et al. paved the road to a clinically sound classification. The American Academy of Otolaryngology and Head and Neck Surgery (AAO-HNS) and the American Joint Committee on Cancer (AJCC) developed the currently widely accepted levels classification of the cervical LNs.AAO-HNS sponsored the work of the Committee of Head and Neck Surgery and Oncology to develop a unified classification of neck dissection operations. The first classification was established in 1991; this was later modified in 2002 and 2008 to become the currently accepted classification.



RESULTS:

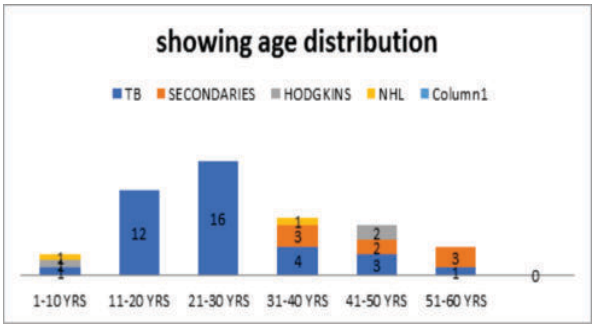
In the present study total number of cases studied are 50,selected from the surgery opd of viswabharathi medical college,Kurnool from Dec 2022 – may 2023

The maximum incidence was found to be of tuberculosis which were 37 (74%), next was secondaries 8(16%), than hodgkins and non hodgkins which are 3(6%) and 2(4%) respectively.

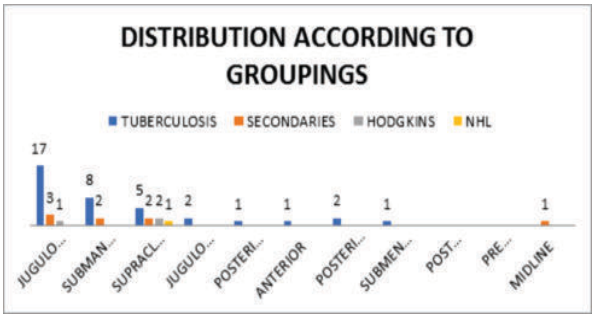


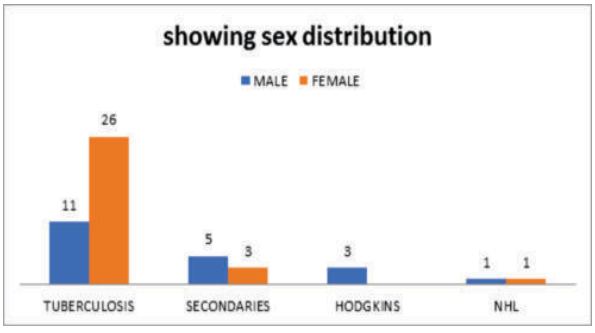
The maximum incidence of tuberculosis was found to be between ages of 11-30 years(28 cases-56%). In secondaries maximum incidence was found to be 31-50 years(7cases-14%).similarly in hodgkins incidence was found to be between 41-50 years(2cases-5%) an in non hodgkins lymphoma it was found to be equal 1in 10years and 1 in 31-40 years.

The maximum cases were in females 30 cases.the ratio in tuberculosis is 2.5 (female:male), in secondaries it is 1.6:1 (male:female),hodgkins were found in male only and in non hodgkins ratio is 1:1.



Digastric group was found to be the maximum affected (21 cases) followed by supraclavicular(10 cases),submandibular(10cases).

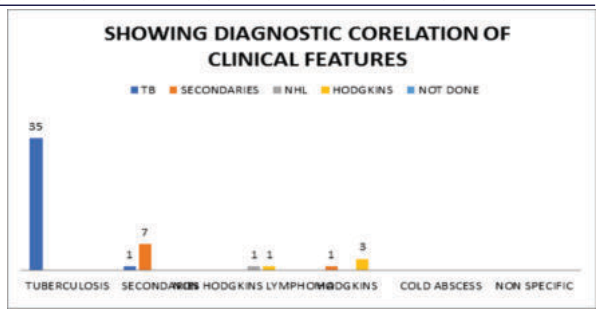




The maximum presenting symptom was swelling followed by pain and fever.

The corelation between clinical features and biopsy results in which accuracy is about 90% i.e in 47 cases, 43 cases matched clinical diagnosis.

The corelation between FNAC and Biopsy results in which fnac diagnosed 37 patients out of 47 patients who had undergone biopsy.



CONCLUSION

Of the 50 cases studied, tuberculosis has the maximum incidence(75%) followed by metastatic (16%) disease of lymphnodes. Between 11-30 years, tuberculosis had the maximum incidence and between 41-50 years metastatic disease had the maximum followed by hodgkins disease. All the patients had cervical lymphadenopathy (100%) and 50% has history of pain and fever. The cheapest and most reliable method of diagnosis is Fine needle aspiration cytology.

In investigations fnac is found to be accurate with 90% accuracy.

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