

Hodgkin Lymphoma in Patients Having Cervical Lymphadenopathy: Experience of DHQ Teaching Hospital, Kohat

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ABSTRACT

Aim: To assess the frequency of Hodgkin Lymphoma in patients presenting with cervical Lymphadenopathy.

Methods: This is a prospective study conducted at District Head Quarter Teaching Hospital Kohat, between January 2012 to December 2014. The data was collected for all patients presenting with cervical lymphadenopathy during the above mentioned period. All the patients with cervical lymphadenopathy were subjected to detailed history, clinical examination, investigations and histopathological examination.

Results: Out of 248 patients presenting with cervical lymphadenopathy, 19 patients were found to be having Hodgkin's lymphoma. The gender distribution was predominantly male making up about 72%. About 50% patients had mixed cellularity whereas about 37.5% patients had nodular sclerosis.

Conclusion: The proportion of Hodgkin's lymphoma in cervical lymphadenopathy is relatively low in our population as compared to the western world.

Keywords: Hodgkin's Lymphoma, Fine Needle Aspiration Cytology (FNAC), Excision Biopsy,

INTRODUCTION

Hodgkin lymphoma is traditionally defined as hematopoietic neoplasm composed of diagnostic Reed-Sternberg cells within a reactive inflammatory cell background¹. Classically Reed-Sternberg cell is large, 30–60µm, having bilobed, vesicular nucleus, with each lobe containing a prominent, round, eosinophilic nucleolus surrounded by a clear zone or halo^{1,2}. The cell has abundant cytoplasm. World Health Organization (WHO) has classified this disease into four subtypes: (A) Nodular Sclerosis (B) Mixed cellularity (C) lymphocytic predominate and (D) lymphocytic depletion^{3,4}.

The third most common site of involvement by malignant Lymphoma is Head and Neck region^{1,2}. Hodgkin's Lymphoma accounts for 20-45% of malignant lymphoma in western countries, but this is significantly less common in Asian countries such as Korea, Japan, Taiwan, and the Philippines with prevalence rates of 4.4-18%^{5,6}. The aim of the present study was to determine the proportion of Hodgkin Lymphoma in the cervical lymphadenopathy along with their pathology and pattern of clinical presentation.

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METHODOLOGY

This study was conducted over a period of three years from January 2012 to December 2014 in Otolaryngology and Surgery department of District Head Quarter Teaching Hospital, Kohat. It was a prospective study of all patients presenting with cervical Lymphadenopathy during the above mentioned period. A detailed clinical history of the patients and their age, gender and duration of symptoms were recorded. A thorough physical examination of chest, abdomen, cardiovascular & central nervous systems along with all lymph nodes especially cervical group of lymph nodes was carried out. The size, consistency, mobility and tenderness of lymph nodes were recorded. The enlarged cervical lymphadenopathy patients underwent FNAC, excision Biopsy and Incisional Biopsy depending on the mobility and fixity to the surrounding structures and inconclusive results of FNAC.

RESULTS

The detail of results is given in tables 1, 2 & 3. During the period of study, 248 patients presented with cervical lymphadenopathy fulfilling the inclusion criteria. These include 138 males and 110 females with cervical lymphadenopathy. Two hundred and fifteen patients underwent FNAC whereas 30 patients underwent excision biopsy and in 3 patient's incisional biopsy were done. Hodgkin's Lymphoma was observed in 19 patients and these include 13 males and 6 females.

Table: 1 Clinical features

Clinical Features	%age
Fever	10(52)
Weight loss	9(47)
Night sweats	9(47)
Anorexia	10(52)
Respiratory symptoms	4(20)
Splenomegaly	5(23)
Hepatomegaly	2(15)

Table 2: Cervical lymph nodes involvement:

Lymph Node	%age
Jugulodigastric	6(30%)
Jugulo-omohyoid	5(28)
Supra clavicular	3(18)
Submandibular	1(5%)
Posterior auricular	1(5%)
Superficial cervical	2(5%)
Occipital	1(5%)

Table 3: Histological pattern

Histopathology	%age
Mixed cellularity	10(52)
Nodular sclerosis	7(38)
Lymphocyte predominant	1(5)
Lymphocyte depleted	1(5)

DISCUSSION

Hodgkin's Lymphoma is a very rare occurring disease and its incidence varies with age, geographical variations and socioeconomic class⁷. In Asia its low prevalence suggest genetic resistance to disease development. Other risk factors include smoking, environmental exposure to cancer causing agents or immunocompromised status^{7,8}. In this study the Hodgkin's lymphoma was 8% and is comparable to the figures reported from various Asian countries^{7,8}. It was equally distributed among various age groups unlike western studies which show a typically bimodal pattern. In a study, about 20% of the patients were above 60 years^{9,10}. It was observed through several other studies that Hodgkins disease in older adults had a poorer prognosis than in younger adults. There is male preponderance with male to female ratio of 3:1. This male preponderance is also reported from developed countries like United States^{7,8,9}.

It is reported that Nodular sclerosis is the most common subtype of Hodgkin's Lymphoma in western countries, however, mixed cellularity is more common feature of less developed countries of Asia like Pakistan^{10,11,13}. Results of our study supported the International and National work done on Hodgkin's Lymphoma. It was proved that there is negligible

difference in the frequency of Hodgekin's Lyphoma in our region and worldwide¹².

CONCLUSION

The Frequency of Hodgkin's lymphoma in cervical lymphadenopathy is relatively low and poor prognosis is observed in patients with advanced stage of disease.

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