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HODGKINS LYMPHOMA IN PATIENTS OF CERVICAL LYMPHADENOPATHY

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Abstract:

Objective: *The aim of this research work is to determine the amount of HL (Hodgkin's lymphoma) in cervical abnormal enlargement of the lymph nodes.*

Methodology*: This research work carried out in Mayo hospital Lahore. The duration of the study was from January 2012 to December 2017. The information gathered from the patients suffering of cervical abnormal enlargement of the lymph nodes during the above described study period of five years. All those patients suffering of CL (cervical lymphadenopathy) underwent to complete previous history, interrogations and assessment with the help of histopathology.*

Results: *There were four hundred and ninety-eight patients suffering of CL in which forty patients found with HL (Hodgkin's lymphoma). Males were making the eighty percent of the total patients. Mixed cellularity was present in more than fifty percent patients whereas nodular sclerosis was present in more than thirty-seven percent patients. Most of the patients were in the 2nd and 3rd stage of the disease. The total survival rate in those five years of study period was about seventy-five percent.*

Conclusion: *The amount of the HL in the abnormal enlargement of the lymph nodes in the cervix is very less in our communities as compared to the countries of the West.*

Key Words: *Lymphocytic Diminution, Cervical Lymphadenopathy, Malignant, lymphadenopathy, Biopsy, Nodes, Histopathology.*

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INTRODUCTION:

The disease of HL is very widespread in the whole world depending upon the variations of geography and regions [1]. The distribution of age, subtypes of histological, medical appearance and results are different between race, demographic, social and economic group. WHO has separated this epidemic into four different types; 1st type is nodular sclerosis, 2nd type is mixed cellularity, 3rd type is lymphocytic predominate the type is lymphocytic diminution. The areas of neck & head are the 3rd most frequent places for the participation of malignant lymphoma [1, 2].

HL is responsible of twenty to forty-five percent malignant lymphomas in the countries of the West but it is important to note that this disease is not common in the countries of Asia as Korea, Philippines, Japan & Taiwan with occurrence rate of more than four percent to eighteen percent [3-6]. The main purpose of this research work was to decide the amounts of the HL (Hodgkin Lymphoma) in the abnormal enlargement of the lymph nodes in cervix with medical appearance and origin & development of this disease.

MATERIAL AND METHODS:

This research work was carried out in a five-year period. The duration of the study was from January 2012 to December 2017 in the department of surgery in Mayo hospital Lahore. This is an eventual research work presenting all the patients suffering of abnormal enlargement of the lymph nodes in the cervix during the period of above mentioned five years. The information of previous medical history, sex and period of the symptoms gathered for all the participants of the research work. The medical aspects of all the patients at the time of their first appearance documented on a special form arranged for every patient. A complete medical evaluation of belly, chest, CNS (central nervous systems) & cardiovascular with the examinations of all nodes of lymph were also conducted.

The information of the dimensions, steadiness, mobility & tenderness of the nodes of lymph nodes recorded. The usual examination including the complete picture of the blood, elaborated report of the urine & X-Ray report of the chest carried out. The nodes of the lymph which were movable & easily available underwent biopsy of the excision. The nodes of the lymph which were very hard to access underwent the biopsy of incision.

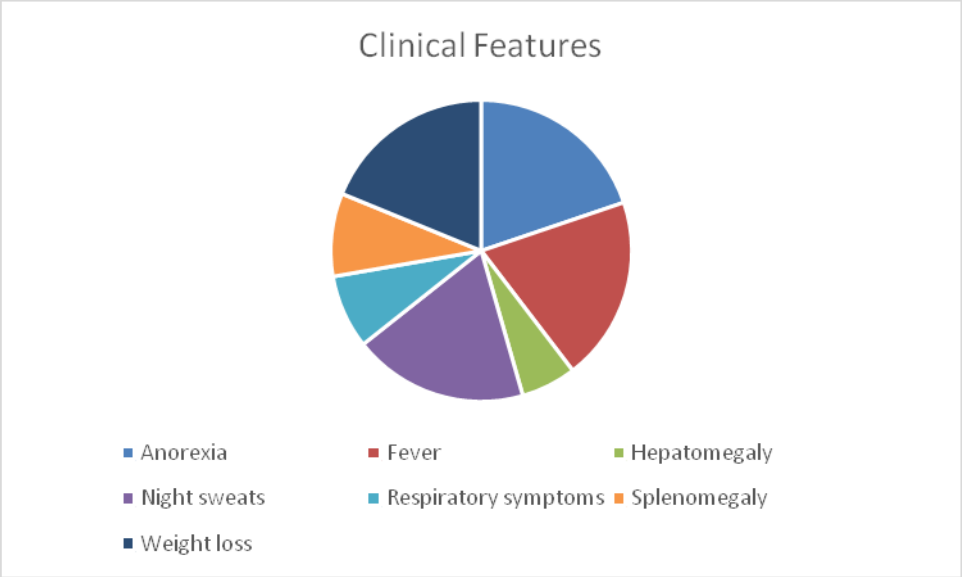
RESULTS:

During the five-year period of this study, four hundred and ninety-eight patients appeared with CL were satisfying the inclusion standard of the study. These included two hundred and eighty-one males and two hundred and seventeen females suffering of abnormal enlargement of the lymph nodes of cervix. Incision biopsy carried out on 311 patients whereas excision biopsy carried out on one hundred and eighty-seven patients. HL (Hodgkin's Lymphoma) assessed in forty patients and there were twenty-nine males and eleven females in this group.

The average age of the patients was twenty-three years. The range of the age of patients was one to thirty-five years. Loss of weight, high fever, anorexia and sweats at night were the most frequent medical aspects. The descriptions of the apparent medical aspects are available in Table-1.

Table-I: Clinical Features (n=40)

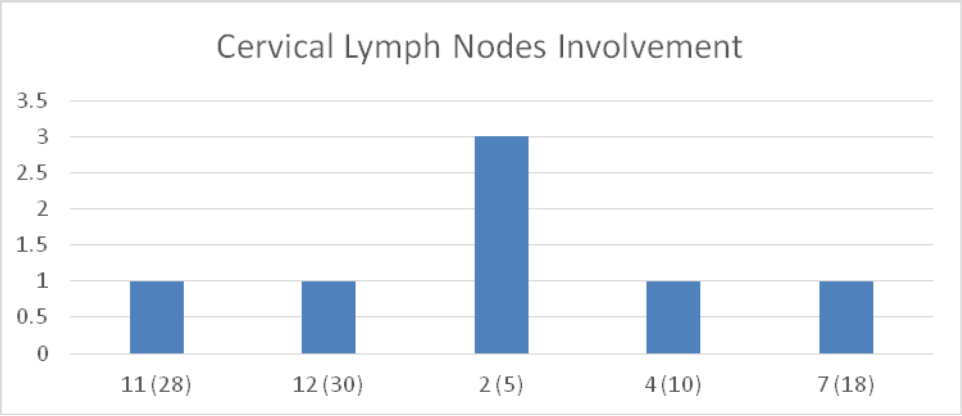
Clinical Parameters	Patients
Anorexia	20.0 (50%)
Fever	20.0 (50%)
Hepatomegaly	6.0 (15%)
Night sweats	19.0 (48%)
Respiratory symptoms	8.0 (20%)
Splenomegaly	9.0 (23%)
Weight loss	19.0 (48%)



Some other types of nodes of lymph as axillary lymph nodes, inguinal lymph nodes & mediastinal lymph nodes were present in twenty-two patients. The inflamed lymph nodes of cervix were non tender, distinct, movable and fixed in steadiness in all the patients suffering of HL. In these forty patients, two groups were the main contributors which are juglo digastric group & jugulo omohyoid group. The elaborated division of HL in different groups of lymph nodes of cervix is available in Table-2.

Table- II: Involved Cervical Lymph nodes

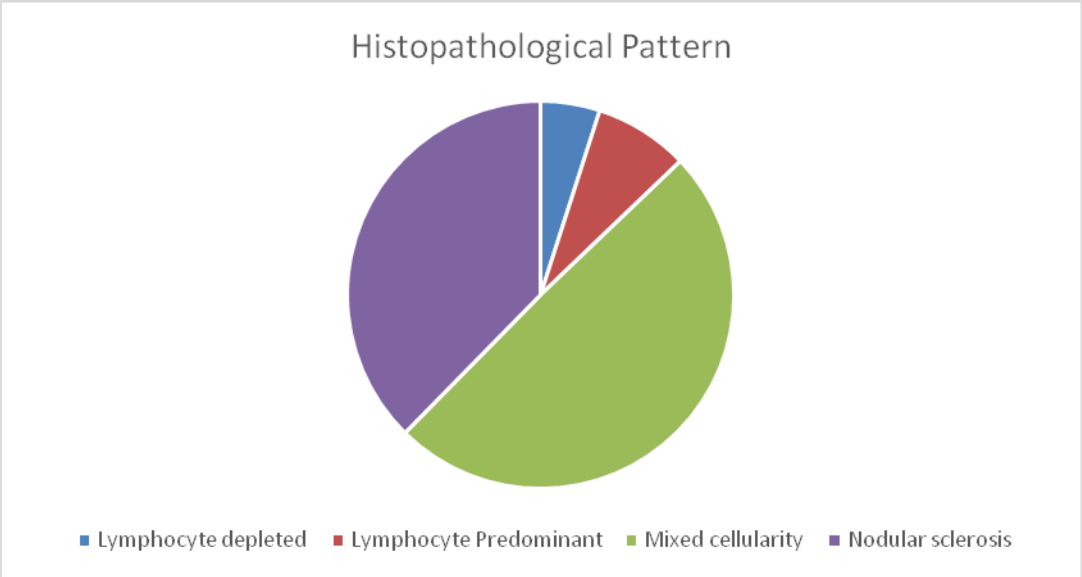
Lymph node Group	Patients (%)
Jugulodigastric	12.0 (30%)
Jugulo-omohyoid	11.0 (28%)
Occipital	2.0 (5%)
Posterior Auricular	2.0 (5%)
Submandibular	2.0 (5%)
Superficial Cervical Lymphnodes	4.0 (10%)
Supra clavicular	7.0 (18%)



The main aspects of histopathology were the mixed cellularity & nodular sclerosis. The elaborated detail of the

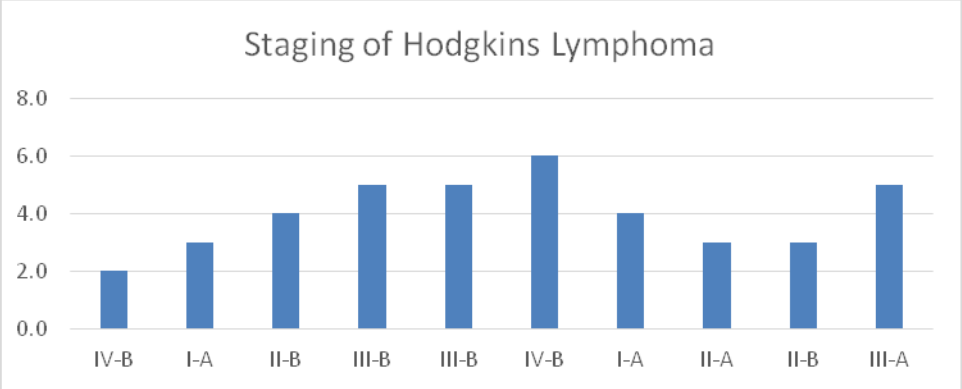
histopathological aspects is present in Table-3.

Table-III: Histopathological pattern (n=40)				
Histopathological feature	*Mixed cellularity*	*Nodular sclerosis*	*Lymphocyte Predominant*	*Lymphocyte depleted*
Patients (%)	*20 (50%)*	*15.0 (38%)*	*3.0 (8%)*	*2 (5%)*



A large number of patients had the 3rd stage of the disease. The elaborated division of the patients in different stages of lymphoma is available in Table-4.

Table-IV: Staging of Hodgkin's Lymphoma		
Stage	Histopathological sub types	Patients
IV-B	Lymphocyte depleted	2.0
I-A	Lymphocyte predominant	3.0
II-B	Mixed cellularity	4.0
III-B	Mixed cellularity	5.0
III-B	Mixed cellularity	5.0
IV-B	Mixed cellularity	6.0
I-A	Nodular sclerosis	4.0
II-A	Nodular sclerosis	3.0
II-B	Nodular sclerosis	3.0
III-A	Nodular sclerosis	5.0



Radiotherapy carried out on most of the patients suffering of 1st and 2nd stage of the disease. Chemotherapy carried out for the patients found with B symptoms and heavy disease with radiotherapy or without radiotherapy. The duration of the medical treatment was from one month to sixty-five months with an average duration of about twenty-six months. The total rate of survival in the five years of this research work was seventy-five percent. The patients suffering of 4th stage of disease had poor prediction than those patients suffering of disease of 2nd and 3rd stage.

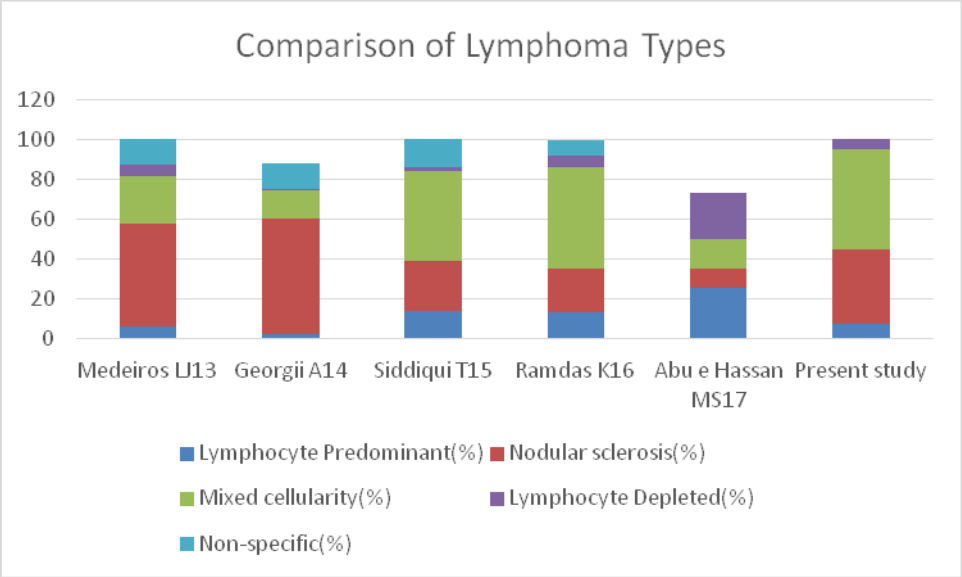
DISCUSSION:

HL is not very common and its occurrence is depends upon the age, geographical region and social economic class. The constantly small occurrences of the HL in the countries of Asia show that there is gene hindrance present to the development of the disease [7]. Some other risk aspects are cigarette smoking, ecological contact to cancer initiating reasons. The amount of the HL (Hodgkin's lymphoma) was eight percent in this research work and this very much similar to the research works conducted in various countries of Asia [3-6]. There was an equal division between different groups of age not similar to the research works of west which display a naturally bimodal pattern [8]. In this research work, about twenty percent of the patients had more than sixty year of age. Many other research works have described that the disease of Hodgkin's in the high age adults had poorer diagnosis than the adults of younger age [8-11].

Males were greater in quantity than the female patients of the research work. This high occurrence in the male patients had presented from the countries which were fully developed like USA [12]. The most frequent type of the HL was nodular Sclerosis as reported by many case studies of countries from the west, whereas, the most common type of the HL in the countries which are under development or third world countries like Pakistan was mixed cellularity. An association of various types of the HL (Hodgkin's Lymphoma) in this research work with occurrence in other countries of the world are available in Table-5 [13-17]. Another research work conducted in Taiwan on thirty-four patients suffering of HL concluded that very high occurrence about more than eighty percent of the advanced medical 3rd and 4th stages of the disease [18].

Table-V: Comparison of subtypes of Hodgkin's Lymphoma

Lymphoma Types	Medeiros LJ[13]	Georgii A[14]	Siddiqui T[15]	Ramdas K[16]	Abu e Hassan MS[17]	Present study
Lymphocyte Predominant(%)	6.70	2.70	14.00	13.50	25.70	7.50
Nodular sclerosis(%)	51.00	57.90	25.00	22.00	9.50	37.50
Mixed cellularity(%)	23.80	13.90	45.00	50.30	14.90	50.00
Lymphocyte Depleted(%)	5.70	0.70	2.00	6.30	22.90	5.00
Non-specific(%)	12.80	13.00	14.00	7.60	---	---



In this study, the amount of the serious medical 3rd and 4th stages were about fifty-four percent. Radiotherapy and /or chemotherapy are the two choices for the treatment of the HL which are depending upon the medical advanced stages of the patients. The rate of the survival in the five-year period of this research work was about seventy-five percent and that rate is comparable to another research work which reported the rate of survival as eighty-three percent [19]. Better rate of survival and fewer occurrences of the serious stages of the disease are the result of the early detection of the disease because of detailed medical assessment.

CONCLUSION:

The amount of the HL (Hodgkin's lymphoma) in the abnormal enlargement of the lymph nodes of cervix is comparatively less and poor diagnosis is present in the patients suffering of the advanced stages of this terrible disease.

REFERENCES:

1. Walker A, Sehoenfield ER, Lowman JT, Mettlin CJ, McMillan J, Grufferman S. Survival of the older patient compared with the younger patient with Hodgkin disease. Cancer 1990;65:1635-40.
2. Guinea VF, Giacco GG, Durad M, Van der Blink JW, Gustavasson A, Mc Vie JG, et al. The prognosis of Hodgkin disease in older adults. J Clinical Oncology 1991;9:947-53. 3. Liang R, Choi P, Todd D, Cham TK, Choy D, Ho F. Hodgkin's disease in Hong Kong Chinese. Hematological oncology 1989; 7:395-403.
4. Paulino AF, Paulino–Cabrera E, Weiss LM, Medeiros LJ. Hodgkins disease in the Philippines. Modern Pathology 1996; 9:115-9.
5. Lymphoma study Group of Japanese Pathologists. The World Health Organization classification of malignant lymphomas in Japan: Incidence of recently recognized entities. Pathology international 2000;50:696-702.
6. Ko YH, Kim CW, Park CS, Jang HK, Lee SS, Kin SH. Real classification of malignant lymphomas in the Republic of Korea: Incidence of recently recognized entities and changes in clinico pathologic features. Cancer 1998; 3:806-12.
7. Sally CG, Joe LH. Hodgkin's lymphoma in Asian. Incidence patterns and risk factors in population based data. Leukemia Research 2000; 26:261-9.
8. Kennedy BJ, Loeb V, Peterson VM, Donegan WL, Natarajan N, Mettlinc. National Survey of pattern of care for Hodgkine disease. Cancer 1985;56:2547-56.
9. Sawyer R, Rosenthal DI, Maniglia AJ, Goodwin WJ. Unusual head and neck manifestation of Non-Hodgkin's lymphoma in children and adult. Laryngoscope 1987; 69:1136-40.
10. Shikhani A, Samara M, Allama C, Salem P, Lenhard R. Primary lymphoma in the salivary gland: report of 5 cases and review of the literature. Laryngoscope 1987; 69:1438-42.
11. Erdkamp FL, Breed WP, Bosch LJ, Wijen JT, Blijham GB. Hodgkins disease in the elderly a registry – based analysis. Cancer 1992;70:830-4.
12. Taylor PRA, Angus B, Owen JP, Proctor SJ. On behalf of the Northern Region lymphoma group Hodgkins disease a population adjusted clinical epidemiology study of management at presentation. J Medicine 1998; 91:131-9.
13. Medeiros LJ, Greiner TC. Hodgkins disease. Cancer 1995;75:357-69.
14. Georgii A, Fischer R, Hubner K. Classification of

Hodgkins disease biopsies by a panel of four histopathologists. Report of 1140 patients from German National Trial. Leuk lymphoma 1993;9(4-5):365-70.
15. Siddiqui T, Pervez S. Spectrum of Hodgkins disease in children and adults. Impact of combined morphologic and phenotypic approach for exclusion of look alikes. J Pak Med Assoc 1999;49(9):211-4.
16. Ramdas K, Sankaranaryanan R, Nair MK. Adult Hodgkins disease in Kerala, Cancer 1994;73:2213-7.
17. Abu eL Hassan MS, Ahmed ME, Fatah-A Gadir. Differences in the presentation of Hodgkins disease in Sudan and Western countries. Trop Geogr Med 1993;45:28-9.
18. Hog RL Suij, Chen YCH, Sieh HC, Wang CH, Liu CH, Shen MC. Hodgkins disease and Non-Hodgkins Lymphoma containing Reed-Sternberg- Like giant cells in Taiwan. A clinicopathologic analysis of 50 cases. Cancer 1992;92:1254-8.
19. Kennedy BJ, Fremgen AM, Menck HR. The national cancer database report on Hodgkins disease for 1985 – 1989 and 1990-1994. Cancer 1998;83:1041-7.