Adult Non-Hodgkin's Lymphoma

Itrat Mehdi (PMRC Research Center, Jinnah Postgraduate Medical Center, Pakistan Medical Research Council, Karachi.)

Adult Non-Hodgkin's Lymphoma (NHL) is a diverse group of lymphoid malignancies, with an increasing annual trend world over[1]. NHL has shGwn an increase by 39% in Caucasians and 46% in black population and is at least three times more frequent than Hodgkin's disease, as shown by the SEER study[2].Intermediate grade lymphoma still constitutes the largest proportion of NHL[2]. Increased incidenceof NHL is largely because of large share from NHL in older age groups[2]. Increased incidence rates of NHL in younger age grouj are attributed to its association with AIDS in recent times[3] and also to classify a large number of cases as NHL which previously used to be labeled as unspecified malignant lymphoma[2]. NHL is more common in developing world and shows a wide geographic variation in its pathobiological characteristics[4,5].

Extranodal lyinphoina is reportedly 26% of all lymphomas and has increased by 4%, with most frequent sites being stomach, skin, oral cavity, pharynx, small intestine and brain in that orde?. Some of the sub-types like diffuse large cell NHL, large cell immunoblastic NHL and small non-cleaved cell NHL are increasing[2]. NHL can be aB cell or T cell type as cell of ongin.

In a local population based study malignant lymphorna are 5.7-8.7% in males and 1.2-1.7% in females[6]. The national cancer database organized by Pakistan Medical Research Council indicates that 6.3% of all male tumors and 1.9% of all females tumors are lymphoma. About 14.8% male lymphoma is NHIL, while 18.4% of female lymphoma are NHL[7].

Inununogenetic sub-typing, flow cytornetty and gene re-arrangement studies and molecular biology tecimiques are increasingly being incorporated in lymphoma management and diagnosis and have changed over concepts tremendously[8]. Hair dyes and herbicides are currently new entities in addition to genetic and envimmnental factors inetiology of NHL. Viruses (HTLV-1, HIVandEBV), congenital immunodeficiency, organ transplantation and autoimmune disorders are otherprecipitating factors[8,9].

The treatment options are surgety, radiotherapy, chemotherapy (CHOP, M-BACOD, m-BACOD, ProMACE/cytaBOM, MACOP-B), with PBST/BMT9. The clinical presentation is vague with symptoms like decreased appetite, loss of weight, excessive night sweats, tiredness, itching, insomnia, discomfortorpain[10].

Excision biopsy is preferred over FNAB where possible. Other tests are complete physical evaluation, CBC with ESR, biochemistry, XR, CT/MRI, bone marrow biopsy, Gallium scan of nodes, lymphangiogram, biopsy/exploration, endoscopy and biopsy. NHL usually shows centrifugal nodal involvement[8-10]. Overall median survival is 8-9 years and increasing condition to early diagnosis combined withprompt and effective treatment[8]. Currently REAL (Revised European American classification of lymphoid neoplasm) is widely used and accepted[8].

The prognosis and overall survival in good in NHL, with early diagnosis and prompt treatment. The same can be achieved in our local lymphoma patients with improvement in diagnostic and therapeutic approach. There is an immense need for impfovement in histopathology training, incorporation of new diagnostic modalities and evaluation of cost effective treatment protocols for our population of patients. There is no reason not to achieve the same level of life expectancy and quality of life in our patients, if these above-mentioned considerations are given the due attention.

References

1. The National Cancer database report on Non-Hodgkin's Lymphoma. Cancer, 1997;80:231 1.20.
2. Greiner TC, Medeiros LJ, Jaffe ES. Non.Hodgkin's Lymphona. Cancer, 1995;75:370-80.
3. Gail MH, Pluda JM, Rabkin CS, et al. Projections of the incidence of non-Hodgkin's lymphoma related to acquired imrnunodeficiency syndrome. J.Natl, Cancer Institute, 1991 ;83:695-701.
4. Obafunwa JO, Akinsete I. Malignant lymphomas in Jos-Nigeria Central. AfricanJ. Med., 1992;38(1):17-25.
5. Intragumtornchai T, Wannakrairoj P. Chaimongkol B, et al. Non-Hodgkin's lymphoma in Thailand. A retrospective pathologic and clinical analysis of 1391 cases. Cancer, 1996;78(8):1813-19.
6. Second Annual Project Report- Population based Cancer Registry, Health Department, Government of Sindh and International Agency for Research on Cancer Uyon France 1995-1996.
7. Pakistan Medical Research Council Multi-Center Tumor Study - Report on tumors 1971-1996; Pakistan Medical Research Council, Islamabad.
8. Shipp MA, Mauch PM, Harris NL. Non-Hodgkin's lymphoma, In Cancer -Principles and Practice of Oncology, Eds. DeVita Jr, VT, Hellman S, Rosenberg SA, 5th eidition, Lippincott-Raven Publishers Philadelphia 1997;2165-22 19.
9. Rosen PJ. Hodgkin's disease and malignant lymphoma, In Manual of clinical oncology, Eds. Cascito DA and Lowitz BB. 3rd edition, Little Brown and Company, Boston, 1995, pp. 347.85.
10. Fisher RI. Comparison of a standard regimen (CHOP) with three intensive chemotherapy regimens for advanced non-Hodgkin's lymphoma. New Engi. J. Med., 1 993;328:1002-8.