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HIV/AIDS and Hodgkin's Lymphoma

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Abstract
Hodgkin's disease is noted with increased frequency among HIV infected patients. The decrease of Immunosuppression associated with disease development is variable. Patients usually present late with advanced disease that involves extra nodal sites, most often the bone marrow, the tongue, rectum, skin, heart and lungs might be the sight of involvement. Patients with HIV/AIDS are at increased risk of developing Hodgkin's lymphoma differ from non HIV infected patient and HL, that it is nearly associated with Epstein Barr Virus, with systemic B Symptoms. The introduction of cART has allowed for the delivery and full dose and dose intensive Chemotherapy regimens. HIV-HL patients are at increased risk for treatment related toxicities and drug – drug interactions which require careful attention.
Keywords: *Hodgkin Disease, EBV, HIV associated HL*
Key Message: *Before the widespread use of ART. There was an estimated 310 fold increased risk for non hodgkin's lymphoma 7.6 fold increase in Hodgkin's disease. Among the HIV/AIDS Patients compared with other population in India there is increased frequency of HD among the HIV infected patients.*

Case Report

Case History

Age & Sex: 57 Years Male

Current Treatment: 1 ½ Year ON ART – TLE Regimen.

Symptoms: Chest Pain during Breathing and Sweating Occurs.

Status of the Patients: Patients has diagnosed as a case of pericardial effusion pericardio centesis done under aseptic precautions started on ATT after two months patient developed bilateral auxillary Swelling about 4*6 cm in size rubbery consistency with fever Not responding to antibiotics excision biopsy done diagnosed as mixed cellular variety of hodgkin's disease.

Introduction

Since the Introduction of CART in 1996, patients with HIV are living layer with improved immune function and reduced risk for developing AIDS.

AIDS defining Cancers such as Non hodgkin's Lymphoma. Kaposis Sarcoma diffuse B cell Lymphoma, primary CNS lymphomoa, Primary effusion Lymphoma have all declined. Burkilf's Lymphoma remains stable. But non AIDS delivery malignancies, such as Hodgkin's lymphoma (HL) have remained stable we have increased incidence. But the risk of many of the cancer remains significantly increased above that observed in general population suggestion an effect of ongoing virus mediated immune

suppression and stimulation of cancer risk. Despite the salutary effect of anti-retro viral therapy.

The majority of patients in developing countries are associated with Epstein Barr Virus(EBV) in the Red Blood Cells Chronic stimulation due to EBV infection is postulated to result in Pleomorphic infiltration, some of the cells undergo a clonal malignant transformation subsequently HL is different from other cancers. The malignant RS cells form only a fraction of the enlarged lymphoid tissues.

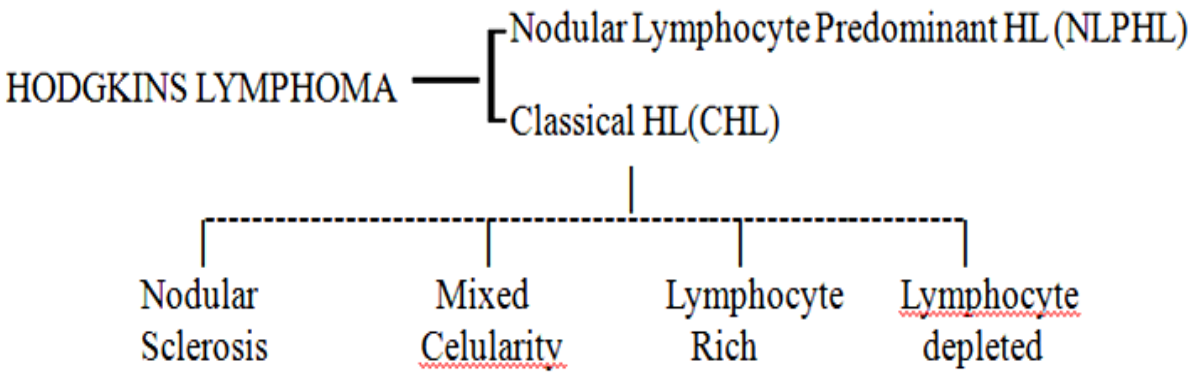
The usual presentation is with painless lymphodemopathic commonly cervical (76%), rubbery consistency. Other areas of involvement include lymphoid tissue of mediasternum (60%), abdomen, aroin , axilla and spleen 25%.

Less common sites include Liver, Bone marrow, Lungs, Pleura, Pericardium and waldeyer's rina.

Constitutional symptoms include unexplained weight Loss(>10% of Body weight over 6 Months) unexplained fever(>38 C for >3Days) and night sweats. As many as 47% of cases are wrongly treated with anti- tuberculosis drugs before the correct diagnosis is achieved.

Classification

Diagnosis of HL requires demonstration of Typical RD cells



India have mixed cellularity as the commonest systology (66-74%)

Staging:

Careful staging is extremely important since it will influence selection of Right treatment approach.

ANN Arbor Staging

Stage I: Involvement of a singly Lymphnode or a single Extra Lymphatic organ or site.

Stage II: Involvement of two or more Lymphnode region on the same side of the diaphgram or localised involvement of an Erotia Lymphatic organ or side.

Stage III: Involvement of Lymphnode region on both sides of diaphgram or localised involvement of an extra Lymphatic organ oriented or spleen or both.

Stage IV: Diffuse or disseminated involvement of one or more extralymphatic organs with are without associated Lymphoid involvement.

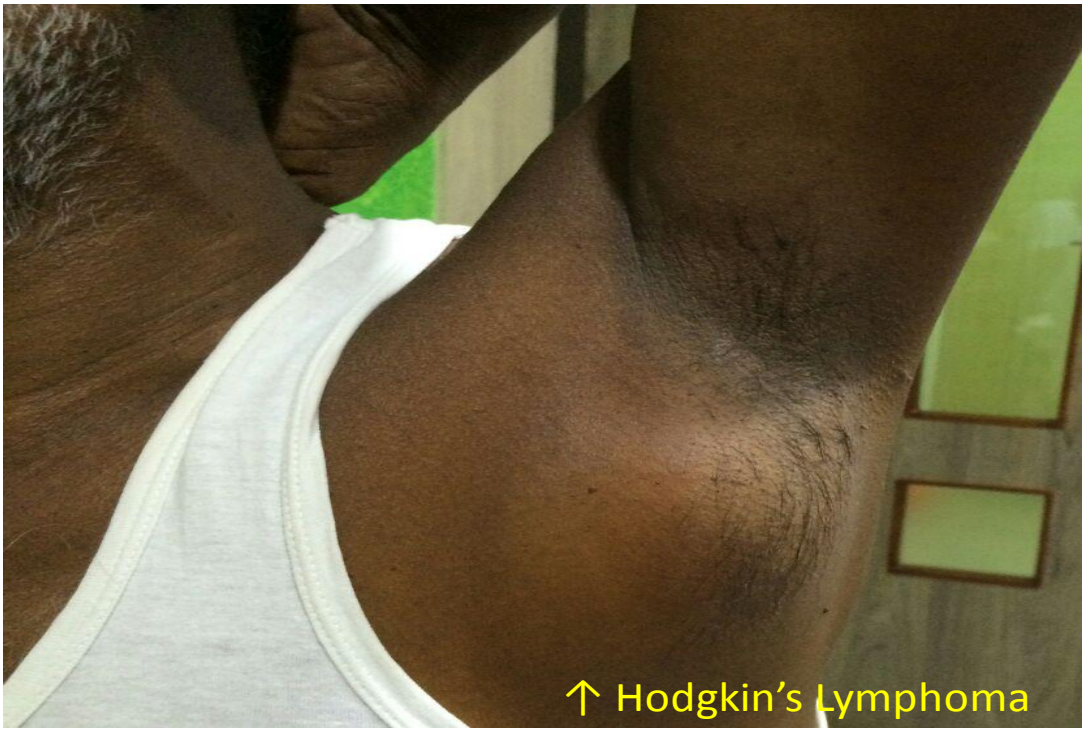
Bone Marrow and liver involvement occurs always Stage IV.

In each Stage Presence or Absence of Symptoms should be noted Asymptomatic and B Symptomatic.

Treatment

S.No.	Stages	Youna Patients	Elderlu Patient
1.	Early Stage Favourable	Right alone Extended Field(30-36 Gy)	Chemotherapy (2Cycles of ABVD
2.	EarlyStage Unfavourable	Chemotherapy (8Cycles +	Chemotherapy (4Cycles of ABVD and involved field RT
3.	Advanced Stages	Chemotherapy (8Cycles)with or without Consolidative Local ART(20-36 GY)	Only Chemotherapy (6-8 Cycles)

RT- RadioTherapy ; ABVD- Doxorubicin+Bleomycin+Vinblastin+Dacarbazine



5% survival of 70-80 % has been achieved with combined treatment in advances HD Never Modalities Monoclonal Antibodies, Radio immune conjugate cellular therapy and new chemotherapeutic agents. Gemcitavine, vinorelbine are being under evaluation for treatment of HD.1

Conclusion

Before the widespread use of ART , there was an estimated 310 fold increased risk for Kaposis Sarcoma , a 113- fold increased risk for Non – Hodgkin's lymphoma but 7.6 fold in Hodgkin's disease, 4.5 fold in multiple myeloma , 3.6 fold Brain Cancer among patients with AIDS compared with general population in the west.

In India there is increased frequency of HD among HIV infected patients.

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