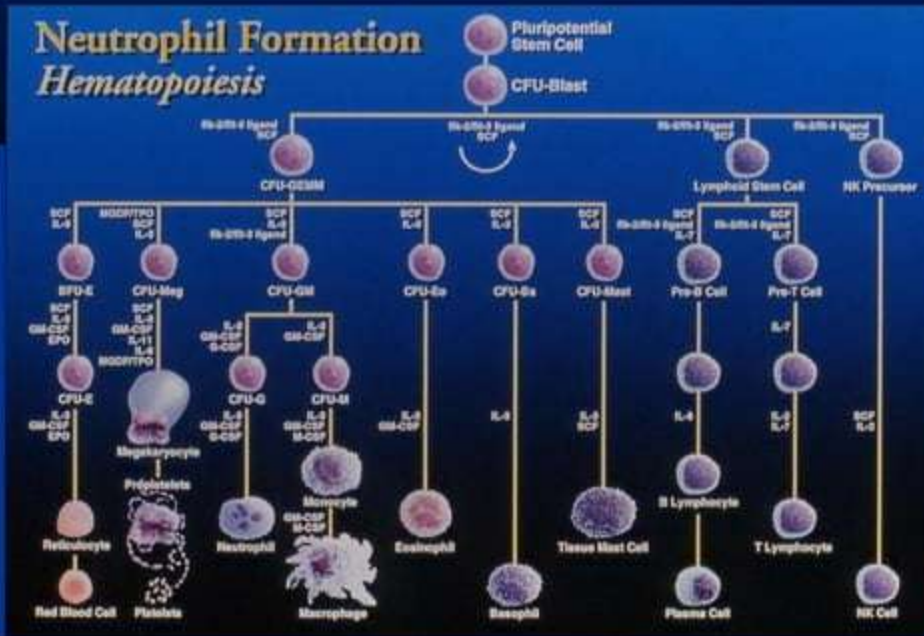
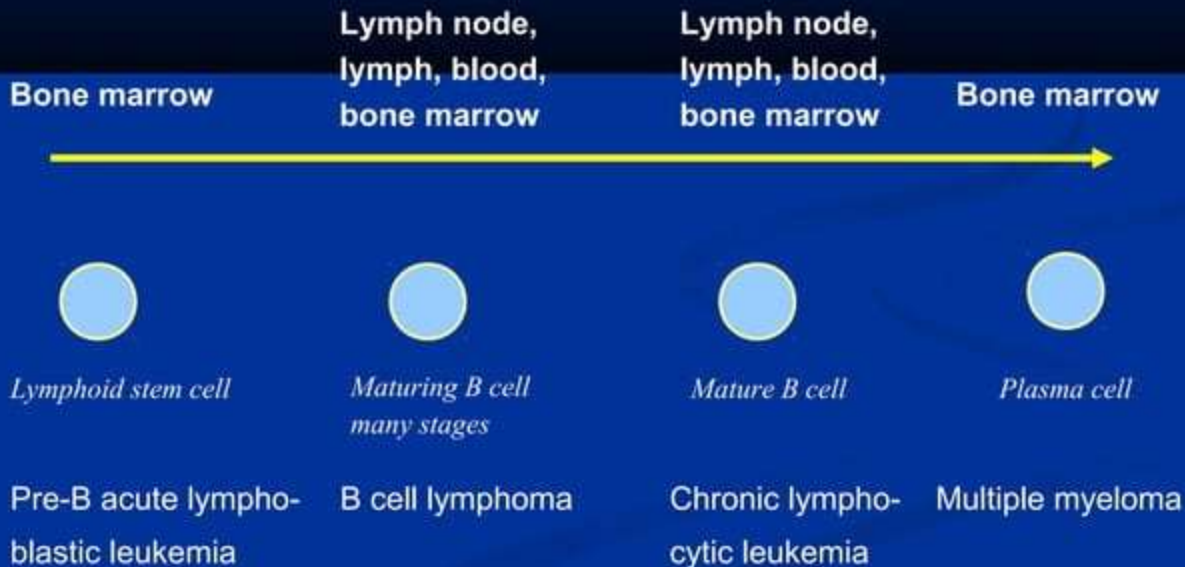


Hodgkin's Disease/lymphomas

Hematopoietic System



B cell malignancies



Hodgkin's Disease/Lymphoma In the Beginning

First described in 1832 by Dr. Thomas Hodgkin

Neoplasm of B lymphocytes – large pleomorphic prominent nucleolus in a halo - Hodgkin cells

Reed-Sternberg cell – binucleate Hodgkin cell with owl eye appearance

Classification:

Classical Hodgkin's

Nodular sclerosis – low grade

Mixed cellularity

Lymphocyte rich classical

Lymphocyte depleted. – high grade

Nodular lymphocyte-rich Hodgkin's



1798-1866

Hodgkin's Disease/Lymphoma In the Beginning

- Bimodal age distribution
 - first peak between 2nd - 3rd decade of life
 - second peak between 5th - 6th decade of life
- Male: Female 2:1 in kids, adults almost equal M:F
- Mixed cellularity (MC) Hodgkin's Disease is more common at younger ages
- More common in immune deficiency patients

Hodgkin's Disease/Lymphoma In the Beginning

- Accounts for ~ 30% of all malignant lymphomas
- Composed of two different disease entities:

Lymphocyte-predominant Hodgkin's (LPHD), making up
~ 5% of cases

Classical HD, representing ~ 95% of all HDs.

A common factor of both HD types is that neoplastic cells constitute only a small minority of the cells in the affected tissue, often corresponding to < 2% of the total tumor

Hodgkin's Disease/Lymphoma In the Beginning

Fatal disease with 90% of untreated patients dying within 2 to 3 years

With chemotherapy, >80% of patients suffering from HD are cured.

Pathogenesis of HD is still largely unknown.

HD nearly always arises and disseminates in lymph nodes

Hodgkin's Disease/Lymphoma

Interest tidbits

- Pel-Ebstein Fevers
- Pain with alcohol consumption

Hodgkin's Disease/Lymphoma

Clinical Presentation

- **Nontender lymph nodes enlargement (localized)**
 - neck and supraclavicular area
 - mediastinal adenopathy
 - other (abdominal, extranodal disease)
- **systemic symptoms (B symptoms)**
 - fever
 - night sweats
 - unexplained weight loss (10% per 6 months)
- **other symptoms**
 - fatigue, weakness, pruritus
 - cough , chest pain, shortness of breath, vena cava syndrome
 - abdominal pain, bowel disturbances, ascites
 - bone pain

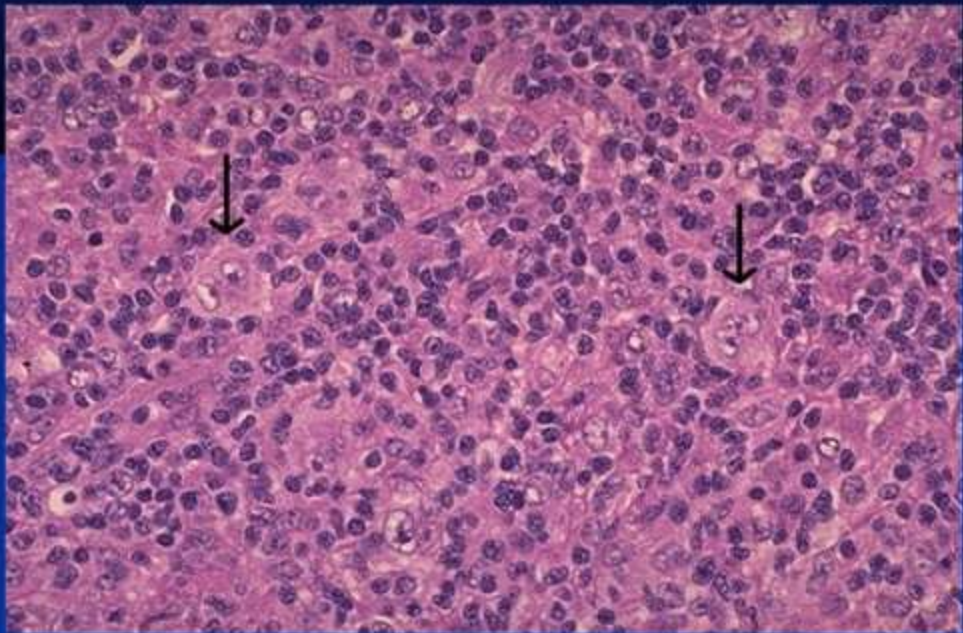
Hodgkin's Disease/Lymphoma

Clinical Presentation

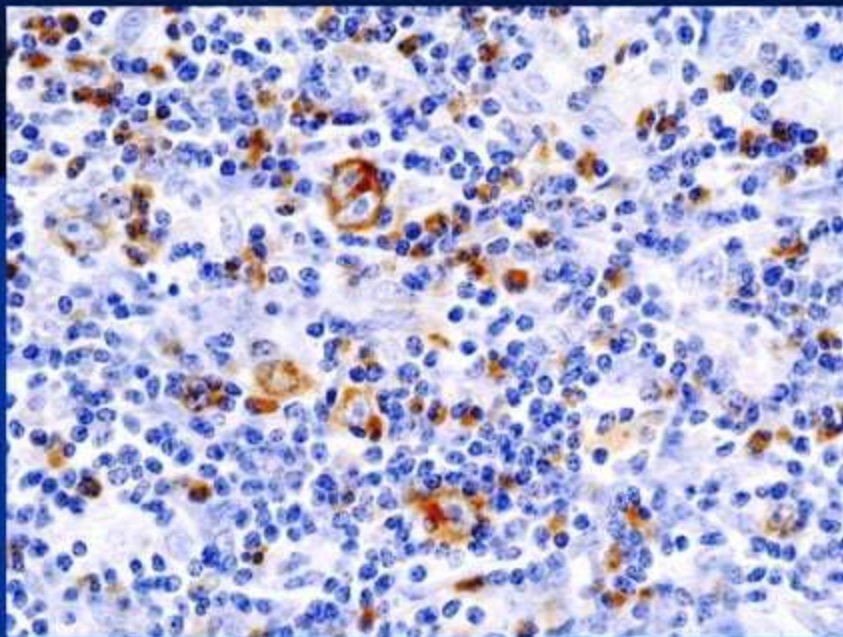
SIGNS & SYMPTOMS	% OF PATIENTS
Lymphadenopathy	90
Mediastinal mass	60
“B” symptoms Fever, weight loss, night sweats	30
Hepatosplenomegaly	25

- Most commonly involved lymph nodes are the cervical and supraclavicular in 75%
- Bone marrow is involved in 5% of patients

Reed-Sternberg Cells



CD 30 Immunostain



Hodgkin's Disease/Lymphoma

Clinical Presentation

Stage Definition

- I Involvement of a single lymph node region (I) or of a single extralymphatic organ or site (I_e)
- II Involvement of two or more lymph node regions on the same side of the diaphragm (II) or localized involvement of an extralymphatic organ or site and one or more lymph node regions on the same side of the diaphragm (II_e)
- III Involvement of lymph node regions on both sides of the diaphragm (III) which may be accompanied by involvement of the spleen (III_s) or by localized involvement of an extralymphatic organ or site (III_e) or both (III_{es})
- IV Diffuse or disseminated involvement of one or more extra lymphatic organs or tissues with or without associated lymph node involvement
-

B symptoms: fever > 38°C for three consecutive days, drenching night sweats or unexplained loss 10% or more of weight the preceding 6 months

Hodgkin's Disease/Lymphoma Treatment

- Unfavorable prognostic factors:
 - Stage IIIB, IV
 - B symptoms
 - Bulky disease
 - High ESR >50

Hodgkin's Disease/Lymphoma Treatment

- Long term effects of treatment should be taken into consideration:
 - Treatment-related second neoplasms (i.e. AML, NHL and breast cancer)
 - Infertility
 - Growth consideration
 - Long-term organ dysfunction (i.e., thyroid, heart, lung)

Hodgkin's Disease/Lymphoma Treatment

- Adolescent patients who have achieved maximum growth can be treated as adult patients
- Chemotherapy alone protocols for localized disease has been used in developing countries with some success