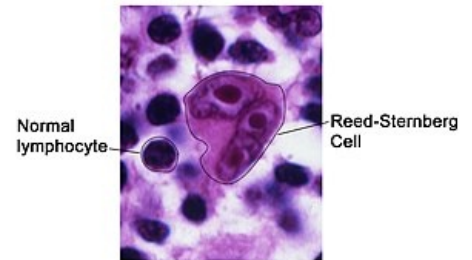


Hodgkin's lymphoma

Hodgkin's lymphoma or **malignant lymphogranuloma**, is a cancer of the lymphatic tissue. The etiology is unknown (genetic predisposition, immune disorders, EBV, HIV). It is most often diagnosed between the ages of 20 and 30, and the incidence rises again after the age of 50. The disease begins in lymph nodes (most often in the axial distribution), from where it spreads to neighboring nodes as well as to the systemic circulation.

Histologically, they are divided according to the number of **Reed-Sternberg** cells (abnormal cells derived from B lymphocytes) and according to the degree of cellular response:

- **type I**: predominance of lymphocytes (few RS cells, many lymphocytes: best prognosis) (5%);
- **type II**: nodular-sclerotic (nodular foci, cells (reticular, lymphocytes, histiocytes) in collagen fibers) (70%);
- **type III**: mixed (20-25%);
- **type IV**: classic, lymphocyte-poor (Sternberg cells proliferated; worst prognosis) (1%).



Microscopic image: Reed and Sternberg's cell - "owl eyes"

Clinical picture

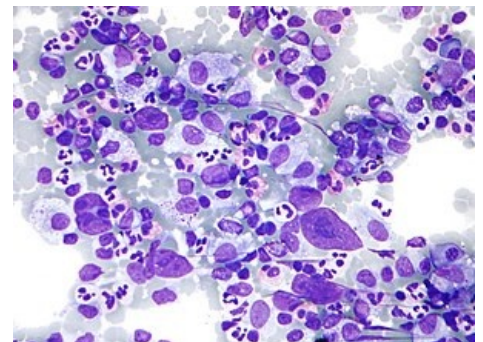
- Painless enlargement of the nodes (cervical, axillary, inguinal);
- fever (Pel-Ebstein fever), itching, sweating, malaise, fatigue, weight loss;
- splenomegaly;
- cough, dyspnea, superior vena cava syndrome (mediastinal involvement);
- effusion, infiltration of parenchymal organs and skeleton (in advanced disability).

Diagnosis

- Nodular extirpation and its subsequent histopathological examination - the presence of RS cells or Hodgkin's cells (RS cell precursors);
- chest x-ray, abdominal US, scintigraphy of the liver and spleen, CT and lymphography , PET;
- trepano-biopsy of the bone marrow

Stages

- **Stage I** (involvement of one lymphatic area or one extralymphatic organ);
- **stage II** (affecting two or more areas on one side of the diaphragm);
- **stage III** (involvement of lymph nodes on both sides of the diaphragm, including an extralymphatic organ or spleen);
- **stage IV** (disseminated involvement of extralymphatic organs independent of nodal involvement).
 - Furthermore, each stage is divided into A and B:
 - **A** - the patient is without general symptoms;
 - **B** - with general symptoms (weight loss of 10% in 6 months, fever more than 38 ° C, night sweats)



Microscopic image of Hodgkin's lymphoma

Complications

- Infections
- Spinal cord compression when affecting the vertebrae.

Therapy

The basic treatment modality is systemic treatment in the form of combined chemotherapy, in localized stages we supplement it with radiotherapy. Basic regimens used: **ABVD** (adriamycin, bleomycin, vinblastine, dacarbazine) and **BEACOPP** (bleomycin, etoposide, adriamycin, cyclophosphamide, vincristine, procarbazine, prednisone).

- **Localized** (early) stages I, II: if with favorable prognosis (without risk factors), 2 × ABVD and 20 Gy radiotherapy. If with unfavorable prognosis (with risk factors), 2 × BEACOPP + 2 × ABVD and 20 Gy radiotherapy.
- **Advanced** Stages III, IV: 6 × BEACOPP
- In case of relapse - **a rescue regimen** (based on platinum derivatives), autologous transplantation .
- **New drugs** are being used to treat relapses: *brentuximab vedotin* (anti-CD30 antibody)^[1]

Prognosis

Patients have a good prognosis: about 70-80% of patients recover. The tumor has good curability.

References

Related articles

- Malignant lymphoma
- Non-Hodgkin's malignant lymphomas
- Diffuse large B-cell lymphoma
- Leukemia
- Chemotherapy
- Radiotherapy

Citations

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