

## Article Navigation

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# Hodgkin's Lymphoma: Biology and Treatment Strategies for Primary, Refractory, and Relapsed Disease

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## Abstract

Hodgkin's lymphomas belong to the most curable tumor diseases in adults. About 80% of patients in all anatomical stages and of all histological subtypes can be cured with modern treatment strategies. In spite of the great clinical progress, the pathogenesis of this peculiar lymphoproliferative entity has not been elucidated completely up until now.

In Section I Drs. Stein, Hummel, and Zollinger describe the different pro-proliferative and antiapoptotic pathways and molecules involved in the transformation of the germinal center B-lymphocyte to the malignant Hodgkin-Reed-Sternberg cell. They use a comprehensive gene expression profiling (Affymetrix gene chip U133A) on B- and T-Hodgkin cell lines and state that the cell of origin is not the dominant determinant of the Hodgkin cell phenotype, but the transforming event. H-RS cells lack specific functional markers (B-T-cell receptors) and physiologically should undergo apoptosis. Why they do not is unclear and a matter of intensive ongoing research.

In Section II Dr. Diehl summarizes the commonly used primary treatment strategies adapted to prognostic strata in early, intermediate and advanced anatomical stages using increasing intensities of chemotherapy (two, four, eight courses of chemotherapy such as ABVD) and additive radiation with decreased doses and field size. ABVD is without doubt the gold standard for early and intermediate stages, but its role as the standard regimen for advanced stages is challenged by recent data with time- and dose-intensified regimens such as the escalated BEACOPP, demonstrating superiority over COPP/ABVD (equivalent to ABVD) for FFTF and OS in all risk strata according to the International Prognostic Score.

In Section III, Dr. Connors states that fortunately there is a considerably decreased need for salvage strategies in Hodgkin's lymphomas since primary treatment results in a more than 80% tumor control. Nevertheless, a significant number of patients experience either a tumor refractory to therapy or an early or late relapse. Therefore, one of the continuing challenges in the care for Hodgkin's lymphomas today is to find effective modes for a second tumor control. High-dose chemotherapy followed by autologous stem cell support has proved to be the treatment of choice when disseminated tumors recur after primary chemo- and or radiotherapy. Nodal relapses respond well to local radiation when they recur outfield of primary radiation without B-symptoms and in stages I–II at relapse. Allogeneic stem cell support needs further intensive evaluation in controlled studies to become an established alternative.

**Topics:** bleomycin/dacarbazine/doxorubicin/vinblastine protocol, chemotherapy regimen, hodgkin's disease, radiation therapy

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Hodgkin lymphoma (HL) is a type of lymphoma in which cancer originates from a specific type of white blood cells called lymphocytes. Symptoms may include fever, night sweats, and weight loss. Often there will be non-painful enlarged lymph nodes in the neck, under the arm, or in the groin. Those affected may feel tired or be itchy. There are two major types of Hodgkin lymphoma: classical Hodgkin lymphoma and nodular lymphocyte-predominant Hodgkin lymphoma. About half of cases of Hodgkin lymphoma are Primary Treatment. Stage IA, IIA Favorable (No Bulky Disease, <3 Sites of Disease, ESR <50, and No E-lesions). REGIMEN. DOSING. and vinorelbine: a new induction regimen for refractory and relapsed Hodgkin's lymphoma. Haematologica. 2007;92(1): 35-41. 16. Shankar A, Hall GW, Gorde-Grosjean S, et al. Treatment out-come after low intensity chemotherapy [CVP] in children and adolescents with early stage nodular lymphocyte predominant Hodgkin's lymphoma - an Anglo-French collaborative report. Eur J Cancer. 2012;48:1700-1706. Unfortunately, patients who are refractory to or relapse after first-line treatment pose a significant therapeutic challenge. There is evidence... Prognostic factors and treatment strategies. Curr Opin Oncol. 2000;12:403-11.PubMedCrossRefGoogle Scholar. Prognostic factors and treatment outcome in primary progressive Hodgkin's lymphoma - a report from the German Hodgkin's Lymphoma Study Group (GHSG). Blood. 2000;96(4):1280-6.PubMedGoogle Scholar. 6. Schmitz N, Pfistner B, Sextro M, et al. Aggressive conventional chemotherapy compared with high-dose chemotherapy with autologous haemopoietic stem-cell transplantation for relapsed chemosensitive Hodgkin disease: a randomised trial. Lancet.