Hodgkin's Lymphoma Characteristics (DEMO)

Lymphoma is a term used to describe lymphoid neoplasms that arise as discrete tissue masses as opposed to widespread involvement of the bone marrow as in leukemias. Within the large group of lymphomas, Hodgkin's lymphoma is distinguished from all other forms due to distinctive pathologic features. This cancer is one of the most common cancers of adolescents and young adults but also has a bimodal age distribution as disease incidences again increase with age. While non-Hodgkin's lymphoma (NHL) frequently occur at extra nodal sites and spread in an unpredictable pattern, Hodgkin's lymphoma is typically localized to a single lymph node or a chain of nodes and spreads first to contiguous lymphoid tissues. Hodgkin's lymphoma also has distinctive morphologic features, particularly characterized by the presence of neoplastic giant cells called Reed-Sternberg cells. Reed-Sternberg cells release factors that induce the accumulation of creative lymphocytes, macrophages, and granulocytes. These cells have a characteristic appearance with two nuclear lobes, large inclusion like nucleoli and abundant cytoplasm. These cells have an owl's eye appearance and have a characteristic immunophenotype including CD15 and CD30 while negative for other B cell markers. In the majority of Hodgkin's lymphomas, the neoplastic Reed-Sternberg cells are derived from germinal center B cells. Hodgkin's lymphoma commonly presents as painless lymphadenopathy, often in the mediastinum. Patients with disseminated disease are more likely to have constitutional B symptoms such as fever, night sweats, and weight loss.

PLAY PICMONIC

B Cell Origin

Basketball

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Owl's Eye Appearance

Owl with giant eyes

Reed-Sternberg cells are commonly described as having an "owl's eye" appearance, due to the presence of two nuclear lobes with abundant cytoplasm.

Bimodal Age Distribution

Graph with Bimodal-peaks

This cancer is one of the most common cancers of adolescents and young adults, but also has a bimodal age distribution as disease incidence again increases with age. The initial peak is in young adults (15-35 years old), while the second is in older adults (>55 years old).