

Classic Hodgkin Lymphoma: Nodular Lymphocyte Predominant Hodgkin Lymphoma

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DESCRIPTION

Hodgkin Lymphoma (HL) is a type of lymphoma in which cancer starts in the lymph nodes as multinucleated Reed-Sternberg Cells (RS cells). The condition was named after the English physician Thomas Hodgkin, who described it for the first time in 1832. Fever, night sweats, and weight loss are some of the symptoms. Non painful swollen lymph nodes are common in the neck, beneath the arm, or in the groin. Those who are affected may feel fatigued or irritation. Classic Hodgkin Lymphoma and nodular lymphocyte-predominant Hodgkin lymphoma are the two main kinds of Hodgkin lymphoma [1]. The Epstein-Barr Virus (EBV) produces approximately half of all cases of Hodgkin lymphoma, that is the most popular type.

A family history of the condition and HIV/AIDS also are risk factors. The presence of cancer and the presence of RS cells in lymph node biopsies are utilized to make a diagnosis. Cases that testing positive for the virus are classified as having Epstein-Barr virus-associated lymphoproliferative diseases. Chemotherapy, radiation therapy, and stem cell transplantation are all used to treat Hodgkin lymphoma. Treatment is frequently determined by how advanced the cancer has become and whether or not it has positive characteristics. A cure is often possible if the condition is diagnosed early. In the United States, 88% of Hodgkin Lymphoma people survive for five years or longer. Survival rates for those under the age of 20 are 97%. However, radiation and some chemotherapy drugs increase the risk of developing new cancers, heart disease, or lung disease in the subsequent decades. In 2015, around 574,000 people globally were identified with Hodgkin lymphoma, with 23,900 (4.2%) died. 0.2% of people in the United States are affected at some time in their lives. The disease is most commonly diagnosed between the ages of 20 and 40.

Symptoms and signs of Hodgkin lymphoma

The most common symptom of Hodgkin cancer is the painless enlargement of one or more lymph nodes. When the nodes are examined, they may feel rubbery and swollen. The nodes of the neck, armpits, and groin (cervical and supraclavicular) are the

most frequently affected (80%-90% of the time, on average). Chest lymph nodes are often affected, and this can be seen in a chest radiograph [2].

Systemic symptoms: About one-third of people with Hodgkin disease will experience systemic symptoms, including such itchy skin. Perspiring at night. Weight loss of at least 10% of a person's total body mass in six months or less that is unexplained, Fever with lower intensities, Fatigue (lassitude). Systemic symptoms such as fever, night sweats, and weight loss are categorized as B symptoms, and their presence suggests that the person's stage is, for example, 2B instead of 2A.

Splenomegaly: Spleen enlargement is common in people with Hodgkin lymphoma. The enlargement is usually severe, and the spleen's size may fluctuate during treatment.

Hepatomegaly: Enlargement of the liver caused by liver involvement is rare in Hodgkin Lymphoma individuals. Hepatosplenomegaly is an illness enlargement of both the liver and the spleen.

Pain after alcohol consumption: Historically, involved nodes are painful after consuming alcohol; however, this phenomenon is extremely rare, occurring in just two to three percent of people with Hodgkin lymphoma, indicating a low sensitivity. However, it's positive predictive value is high enough to be regarded a pathognomonic sign of Hodgkin lymphoma. The pain usually starts within minutes of heavy drinking and originates from the region where a lymph node is involved. Sharp and stabbing pain has been described and also dull and aching pain [3].

Back pain: In some cases of Hodgkin lymphoma, nonspecific back pain (pain that cannot be localized or its cause determined by examination or scanning techniques) has been reported. The lower back is the most commonly affected region.

People may also present with a cyclical high-grade fever known as Pel-Ebstein fever, or simply "P-E fever." However, whether or not P-E fever exists is unclear. Nephrotic syndrome is most commonly caused by minimal change disease in individuals with Hodgkin lymphoma. Airway obstruction, pleural/pericardial effusion, hepatocellular dysfunction, or bone marrow

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infiltration are all limited condition. Hodgkin lymphoma must be distinguished from non-cancerous causes of lymph node swelling (such as infections) as well as other types of cancer. Lymph node biopsy is used to obtain a definitive diagnosis (usually excisional biopsy with microscopic examination). Blood tests are also employed to assess the function of major organs and the safety of chemotherapy [4]. PET scanning is used to detect small deposits that are not observable on CT scanning. PET scans can also be used for functional imaging (by using a radiolabeled glucose to image tissues of high metabolism). A gallium scan may be used instead of a PET scan in some cases.

Types of Hodgkin lymphoma

Hodgkin lymphoma is classified into two types, classic Hodgkin lymphoma and nodular lymphocyte predominant Hodgkin lymphoma. Classic Hodgkin lymphoma and nodular lymphocyte Hodgkin lymphoma are about 90% and 10% more common, respectively [5]. The two types differ in its morphology, phenotype, molecular features, and, as a result, clinical behavior and presentation. Classic Hodgkin lymphoma (excluding nodular lymphocyte predominant Hodgkin lymphoma) is classified into four pathologic subtypes based on Reed-Sternberg cell morphology and the composition of the reactive cell infiltrate seen in lymph node biopsy specimens (the cell composition encompassing the Reed-Sternberg cell(s)). The presence of EBV in Reed-Sternberg cells is most common in lymphocyte depleted HL (>70%) and mixed cellularity HL (70%), while it is less common in lymphocyte-rich HL (40%) and relatively uncommon in nodular sclerosing HL [6].

CONCLUSION

The treatment may including physical exercises as part of routine treatment for adult patients with hematological malignancies such as Hodgkin lymphoma may result in little to no difference in mortality, quality of life, or physical functioning. These exercises may result in a modest reduction in depression. Furthermore, aerobic exercises are likely to decrease fatigue. The evidence on the effect on anxiety and serious adverse events is unclear.

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