

# Second Cancers in Survivors of Hodgkin Lymphoma: Risks and Recommendations

**Yvonne Leahy, RN**

Survivors of Hodgkin lymphoma (HL) who received certain oncology treatment years ago may have a lifelong risk for second cancers. This article reviews evidence-based data about subsequent solid tumor development in HL survivors. Regarding the development of solid cancer, a significant difference existed between one study group of HL survivors and same-aged people from the general population. HL treatments using combinations of radiation and chemotherapy and those using extended-field radiation have been suggested to pose an increased risk for second cancers. Changes in treatment for HL reflect researchers' attempts to reduce late complications of oncology treatment. Oncology nurses are in a unique position to counsel patients with HL and survivors regarding the importance of follow-up assessments, cancer-prevention practices, and screening recommendations. Ultimately, results will ensure that HL survivors have a better chance of wellness.

**H**odgkin lymphoma (HL) is seen more often in white people living in the United States, Canada, Switzerland, and northern Europe compared to people living in the Far East and Asia (Connors, 2004). HL is predominantly seen in young adults. Only about 5% of HL cases occur in children younger than 15 years. Experts have studied HL etiologic factors. One theory for a cause, based on inferential evidence, focuses on genetics (Connors, 2004). First-degree relatives of patients with HL have a higher risk of developing the lymphoma compared to families without a history of HL. Another theory focuses on the Epstein-Barr virus (EBV) (Connors, 2004). Some parts of the world, where crowding exists, have a higher incidence of HL in children. Perhaps such children have enhanced exposure to viruses such as EBV. Research shows that 90% of people acquire EBV infection before age 20 (Connors, 2004).

HL usually presents as painless enlargement of supradiaphragmatic lymph node(s) (see Figure 1). Only 25% of patients with HL present with classic B symptoms such as significant weight loss, persistent fever, and night sweats. The symptoms often are indicative of more advanced disease. Fairly large mediastinal HL tumors can develop without alarming symptoms. An open lymph node biopsy is required to diagnose HL histologic subtypes (Connors, 2004). The four types of HL, in order of frequency of diagnosis, are nodular sclerosing, mixed cellularity, lymphocyte predominant, and lymphocyte depleted. The nodular sclerosing subtype, which accounts for nearly two-thirds of all HL diagnoses, is characterized by sclerosing bands surrounding nodules which contain Reed-Sternberg cells in a background of inflammatory cells (Connors, 2004) (see Figure 2).

## At a Glance

- ◆ Survivors of Hodgkin lymphoma (HL) may be at risk for second cancers for decades following original diagnosis and treatment.
- ◆ Present-day management of HL includes providing effective first-line treatment, which has the fewest late complications.
- ◆ Oncology nurses are in a unique position to counsel HL survivors regarding the importance of follow-up assessments, cancer-prevention practices, and screening recommendations.

## Incidence and Staging

Approximately 8,220 people living in the United States will be diagnosed with HL in 2008. This lymphoma is slightly more common in men than women (Ries et al., 2008). The incidence of HL has remained constant in the past two or three decades (Tsang, Hodgson, & Crump, 2006).

Yvonne Leahy, RN, is a volunteer at the Canadian Cancer Society in Stirling, Canada. No financial relationships to disclose. (Submitted September 2007. Accepted for publication October 5, 2007.)

Digital Object Identifier:10.1188/08.CJON.437-442