

HEALTH IN OUR HANDS!

The Arkansas State University Wellness Program Newsletter
www.clt.astate.edu/wellness



Lymphoma

Overview

Lymphoma is cancer in part of the immune system called the lymphatic system. There are two types of lymphoma cancer: Hodgkin and Non Hodgkin Lymphoma. Hodgkin lymphoma is distinguished by the presence of Reed-Sternberg cells. This type of cancer is one of the most curable forms. Non-Hodgkin lymphoma (NHL) has many subtypes. The subtypes are aggressive (fast-growing) which can be cured and indolent (slow-growing) which can be managed with treatment. NHL develops when a white blood cell, either a T cell or a B cell, becomes abnormal. When this cell becomes abnormal it can reproduce at a faster rate or have a longer life cycle. The abnormal cells can go to any part of the body. When the cells don't die they can form masses that could develop into tumors. NHL is a diverse group of blood cancers and can affect the blood and bone marrow. The lymph vessels anywhere in the body can be affected. The lymph nodes found in the neck, underarms, chest, abdomen, and groin store white blood

cells. The tonsils, thymus and the spleen are common lymphatic system parts affected by NHL.

Causes & Risk Factors

The cause of Non-Hodgkin lymphoma is not completely understood but there are some risk factors that increase a persons chance of developing the disease. The risk factors include:

- A weakened immune system
- Individuals over 60 years old
- Exposure to herbicides or pesticides
- Exposure to certain bacteria and viruses including HIV/AIDS, Epstein-Barr virus, human T-lymphocytotropic virus, and Helicobacter pylori
- Research is being conducted to study obesity as a risk factor

Signs & Symptoms

The signs and symptoms of lymphoma are often confused

with the symptoms of the flu, a cold or other respiratory infections. Common symptoms, if it starts in lymph nodes, include:

- ✓ Swollen, painless lymph nodes in the neck armpit or groin
- ✓ Fever
- ✓ Unexplained weight loss
- ✓ Sweating, especially at night
- ✓ Chills
- ✓ Lack of energy

If it starts in other areas besides the lymph nodes for example bone, lung or gastrointestinal tract, symptoms include:

- ✓ Coughing or trouble breathing
- ✓ Chest pain
- ✓ Pain, swelling or bloating in abdomen
- ✓ Rashes and itching
- ✓ Bone pain

Diagnosis

In order to confirm a diagnosis of Non-Hodgkin lymphoma a biopsy will be taken of the lymph node. Then additional tests will be performed

to stage the lymphoma. The biopsy will identify the subtype and help to develop a treatment plan. It is a good idea to get a second opinion after a diagnosis. Types can be easily misinterpreted and effective treatment depends on the subtype. In order to stage lymphoma a physical exam, imagining tests, blood tests, and blood marrow tests will be performed.

Staging

Staging lymphoma is important in developing a prognosis and treatment plan. The stage is determined by the number and location of the affected lymph nodes. Most patients are diagnosed in stage III or IV. Late stages are not incurable depending on the subtype.

- Stage I – one lymph node region
- Stage IE – one area or organ other than the lymph nodes
- Stage II – two or more lymph node regions that are close to each other and on the same side of the diaphragm
- Stage IIE – one organ or area other than the lymph node and one or more lymph node regions nearby the affected organ or area and possibly one or more lymph node regions that are on the same side of the diaphragm
- Stage III – several lymph node regions both above and below the diaphragm
- Stage IIIE – one organ or area other than the lymph nodes and several

lymph node regions both above and below the diaphragm

- Stage IV – widespread disease in one or more organs or areas other than the lymph nodes and possibly one or more lymph node regions

Treatment

The first step in treatment is finding a hematologist oncologist. There are several approaches for treatment.

- Chemotherapy and other drug therapies
- Radiation therapy combined with chemotherapy
- Stem cell transplantation
- Watch-and-wait approach
- Clinical trials

Treatment results vary among patients. The average NHL five-year survival rate for 1996-2006 was 67.4 percent. Improvements are continuing to be made to the treatment plans. Once NHL is in remission, it's important to continue with regular follow-up care.

Handling & Surviving

There are many concerns when dealing with lymphoma, and it can be hard to handle. For support go to:

- Doctors, nurses, and other members of the health care team with questions about treatment, work and activities.

- Social workers, counselors, or members of the clergy can help with feelings or concerns about financial aid, home care or emotional support.
- Support groups can help with stress and coping. For web support groups you can visit www.lls.org
- Information specialists at 1-800-4-CANCER and LiveHelp for locating programs and services.

References

- www.lls.org
- www.cancer.gov
- www.nlm.nih.gov/medlineplus/lymphoma.html
- www.lymphoma.org

Upcoming Events:

October 20 – Susan G. Komen Race for the Cure 8 am Little Rock, AR

Other News:

**If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at hanrahan@astate.edu.

The Arkansas State University Employee Wellness Newsletter is published monthly during the academic year by the College of Nursing and Health Professions. Health questions can be addressed to Dean Susan Hanrahan, Ph.D., ext. 3112 or hanrahan@astate.edu. Produced by Michelle Williams, graduate student in the College of Nursing and Health Professions, Physical Therapy Program.