Causes, Risk Factors, and Prevention

Risk Factors

A risk factor is anything that affects your chance of getting a disease such as cancer. Learn more about the risk factors for lymphoma of the skin.

- What Are the Risk Factors for Lymphoma of the Skin?
- Do We Know What Causes Lymphoma of the Skin?

Prevention

There is no way to prevent all skin lymphomas. But there are things you can do that might lower your risk. Learn more.

- Can Lymphoma of the Skin Be Prevented?

What Are the Risk Factors for Lymphoma of the Skin?

A risk factor is anything that increases your chance of getting a disease like cancer. While most people with lymphoma of the skin may have some factors that make them more likely to get this disease (such as their age or gender), in most people there is no clear cause of the lymphoma. Having one or more risk factors doesn’t mean that you will develop this cancer.

Age

Age is an important risk factor for this disease, with most cases occurring in people in their 50s and 60s. But some types of skin lymphoma can appear in younger people,
even in children.

**Gender and race**

Most (but not all) types of skin lymphoma are more common in men than in women. Most also tend to be more common in African-Americans than in whites. The reasons for this are not known.

**Weakened immune system**

Skin lymphomas may be more common in people with acquired immunodeficiency syndrome (AIDS), who have a weakened immune system. They may also be more common in people who have had an organ transplant such as a heart, kidney or liver transplant. These people must take drugs that suppress their immune system, which may raise the risk of skin lymphoma (or lymphomas in other parts of the body).

**Infections**

Infection with the human immunodeficiency virus (HIV), the virus that causes AIDS, may increase a person’s risk of skin lymphoma.

Infection with the HTLV-1 virus has been linked with the rare adult T-cell leukemia/lymphoma, although most people infected with this virus do not develop lymphoma. This infection is most often seen in parts of Japan and the Caribbean.

Infection with Epstein-Barr virus (EBV) has been linked with some types of lymphoma, including extranodal NK/T-cell lymphoma, nasal type. But EBV infection is common, and most people infected with EBV do not go on to develop lymphoma.

In parts of Europe (but not in the United States), infection with *Borrelia*, the bacteria that causes Lyme disease, has also been linked with skin lymphomas. This link has only been reported in a small number of cases—most people with skin lymphoma have not had Lyme disease, and most people with Lyme disease do not develop lymphoma of the skin.

Some studies have suggested that infections with other viruses might also be linked with skin lymphomas, but more research is needed on this.

- **References**
Do We Know What Causes Lymphoma of the Skin?

Some risk factors can make a person more likely to get lymphoma of the skin, but it's not always clear exactly how these factors might increase risk.

Scientists have learned how certain changes in the DNA inside normal lymphocytes might cause them to become lymphoma cells. DNA is the chemical in each of our cells that makes up our genes – the instructions for how our cells function. We usually look like our parents because they are the source of our DNA. But DNA affects more than just how we look.

Some genes control when our cells grow, divide into new cells, and die at the right time. Certain genes that help cells grow, divide, or live longer are called oncogenes. Others that slow down cell division or cause cells to die at the right time are called tumor suppressor genes. Cancers can be caused by DNA changes that turn on oncogenes or turn off tumor suppressor genes.

Some people inherit DNA mutations (changes) from a parent that increase their risk of developing some types of cancer. But lymphoma of the skin is not one of the cancer types often caused by inherited mutations.

DNA changes related to lymphoma of the skin are usually acquired after birth, rather than being inherited. Some of these acquired changes may have outside causes (such as infections), but often they occur for no apparent reason. They seem to happen more often as we age, which may help explain why skin lymphomas usually occur in older people.

Scientists are learning about the exact gene changes that cause skin lymphomas. But even though they have found some of these gene changes, they still do not know why
these changes occur.

The immune system seems to play an important role in some lymphomas. People with immune deficiencies (due to inherited conditions, drug treatment, organ transplants, or HIV infection) seem to have a greater chance of developing skin lymphoma than people without an immune deficiency, but it’s not clear why.

- References
See all references for Lymphoma of the Skin

Can Lymphoma of the Skin Be Prevented?

Most lymphomas of the skin have no known cause, so there is no sure way to prevent them from developing.

Having a weakened immune system may raise your risk of skin lymphoma, so making sure your immune system stays healthy might be one way to limit your risk. An example of this would be to avoid known risk factors for infection with HIV (the virus that causes AIDS), such as intravenous drug use or unprotected sex with someone whose HIV status is unknown. You can read more about HIV infection in HIV, AIDS, and Cancer.

- References
See all references for Lymphoma of the Skin

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