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# CANCER FACTS

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National Cancer Institute • National Institutes of Health  
Department of Health and Human Services

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## Merkel Cell Cancer

### Key Points

- Merkel cell cancer is a rare cancer that develops on or just beneath the skin and in hair follicles. It occurs most often on the face, head, and neck.
- Early detection and treatment are important because the disease can spread rapidly. Merkel cell cancer is difficult to cure once it spreads.
- People taking drugs to suppress their immune system after an organ transplant can develop Merkel cell cancer quickly.
- Researchers believe that exposure to sunlight may increase a person's risk of this disease.

Merkel cell cancer, also called neuroendocrine cancer of the skin or trabecular cancer, is a rare cancer that develops on or just beneath the skin and in hair follicles. It usually appears as firm, painless, shiny skin lumps (nodules), or tumors. These red, pink, or blue tumors vary in size from less than a quarter of an inch to more than 2 inches. About half of all Merkel cell cancers occur on the sun-exposed areas of the head and neck. Another one-third begin on the arms and legs. The cancer may also begin on other parts of the body, such as the trunk.

The cause of Merkel cell cancer is not known. However, researchers have learned that it can develop quickly in people who have had an organ transplant and are taking drugs to suppress



their immune system. Exposure to arsenic may also increase the risk for Merkel cell cancer. Because this disease occurs so often on the face, head, neck, and extremities, researchers believe that exposure to sunlight may play a role.

This type of cancer occurs mostly in people after age 70, but it can occur at other ages as well. The majority of patients with Merkel cell cancer are white, and more men than women develop the disease.

It is difficult to diagnose this type of cancer because Merkel cells often resemble cells found in other types of cancers, especially some types of lung cancer. The doctor removes a sample of tissue from the abnormal area, and a pathologist carefully studies the sample under a microscope to check for cancer cells. This procedure is called a biopsy.

The doctor also checks the skin all over the body and examines lymph nodes for signs of swelling. Blood cell counts and a liver function test also help in the diagnosis. In some cases, the doctor may order a CT scan.

Because Merkel cell cancer is uncommon and is difficult to diagnose, patients may want a second opinion about the diagnosis and treatment plan before starting treatment. Some insurance companies require a second opinion; others may pay for a second opinion if a patient requests it.

Surgery is the usual treatment for Merkel cell cancer. The tumor is removed along with a border of healthy tissue. If the tumor is too large to be removed, or is located in a place where removal would be difficult or dangerous, the patient may have radiation or chemotherapy to try to shrink the tumor.

Nearby, or regional, lymph nodes are often removed because they may contain cancer cells. Sometimes the doctor does a sentinel lymph node biopsy. In this procedure, the doctor

injects a dye or radioactive substance near the tumor. This material flows into the first lymph nodes where cancer is likely to spread (the sentinel nodes). These nodes are then removed and checked for cancer. Radiation therapy may be directed at the site of the surgery and to nearby lymph nodes to destroy any remaining cancer cells.

Merkel cell cancer grows rapidly and often metastasizes (spreads) to other parts of the body. Even relatively small tumors can metastasize. Merkel cell cancer most often spreads to regional lymph nodes; it also may spread to the liver, bones, lungs, and brain. Merkel cell cancer that has metastasized may respond to treatment with chemotherapy, but this therapy usually does not cure the disease. Early diagnosis and treatment of Merkel cell cancer are important factors in decreasing the chance of its spread.

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### **Sources of National Cancer Institute Information**

#### **Cancer Information Service**

Toll-free: 1-800-4-CANCER (1-800-422-6237)

TTY (for deaf and hard of hearing callers): 1-800-332-8615

#### **NCI Online**

##### ***Internet***

Use <http://cancer.gov> to reach the NCI's Web site.

##### ***LiveHelp***

Cancer Information Specialists offer online assistance through the *LiveHelp* link on the NCI's Web site.

**This fact sheet was revised on 4/3/03**