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About Merkel Cell Skin Cancer

Overview

If you've been diagnosed with Merkel cell carcinoma or are worried about it, you likely have a lot of questions. Learning some basics is a good place to start.

- [What Is Merkel Cell Carcinoma?](#)

Research and Statistics

See the latest estimates for new cases of Merkel cell carcinoma in the US and what research is currently being done.

- [Key Statistics for Merkel Cell Carcinoma](#)
 - [What's New in Merkel Cell Carcinoma Research?](#)
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What Is Merkel Cell Carcinoma?

Cancer starts when cells begin to grow out of control. Cells in nearly any part of the body can become cancer, and can then spread to other parts of the body. To learn more see [What Is Cancer?](#)¹

Merkel cell carcinoma (MCC) is a rare type of skin cancer. It starts when cells in the skin called Merkel cells start to grow out of control. MCC tends to grow quickly and can be hard to treat if it spreads beyond the skin.

Merkel cells

Merkel cells are thought to be a type of skin **neuroendocrine cell**, because they share some features with nerve cells and hormone-making cells. Merkel cells are found mainly at the base of the top layer of the skin (the epidermis). These cells are very close to nerve endings in the skin. They help us sense light touch, which lets us do things like feel the fine details on an object's surface.

Merkel cells were first described in the late 1800s by a German doctor named Friedrich Merkel.

Merkel cell carcinoma

Because Merkel cells are a type of neuroendocrine cell, Merkel cell carcinoma (MCC) is also sometimes called **neuroendocrine carcinoma of the skin**. Another name for MCC is trabecular carcinoma (or trabecular cancer).

MCC is much less common than most other types of skin cancer (see below), but it's one of the most dangerous types. (The other dangerous skin cancer is melanoma.) It's much more likely than common skin cancers (squamous and basal cell skin cancers) to spread to other parts of the body, and it can be very hard to treat if it has spread.

These cancers most often start on skin that's exposed to the sun, like the face (the most common site), neck, and arms. But MCC can start anywhere on the body. Merkel cell tumors often look like firm, pink, red, or purple lumps or bumps on the skin. They usually don't hurt, but they're fast-growing and can sometimes open up as ulcers or sores (see [Signs and Symptoms of Merkel Cell Carcinoma²](#)).

Nearly all MCCs start on the skin, but a very small portion start in other parts of the body, such as inside the nose or esophagus.

Other types of skin cancer

There are other, more common skin cancers. For more on these types of cancers, see [Basal and Squamous Cell Skin Cancer³](#) and [Melanoma Skin Cancer⁴](#).

Less common types of skin cancer

Other, much less common types of skin cancer include:

- [Kaposi sarcoma](#)⁵
- [Lymphoma of the skin](#)⁶
- Skin adnexal tumors (tumors that start in the hair follicles or skin glands)
- Various types of [sarcomas](#)⁷

Hyperlinks

1. www.cancer.org/cancer/cancer-basics/what-is-cancer.html
2. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/signs-and-symptoms.html
3. www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer.html
4. www.cancer.org/cancer/melanoma-skin-cancer.html
5. www.cancer.org/cancer/kaposi-sarcoma.html
6. www.cancer.org/cancer/skin-lymphoma.html
7. www.cancer.org/cancer/soft-tissue-sarcoma.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Merkelcell.org. Seattle Multidisciplinary MCC Team, University of Washington MCC Research, Fred Hutchinson Cancer Research Center, and the Seattle Cancer Care Alliance/Skin Cancer. What is a Merkel cell? Accessed at www.merkelcell.org/about-mcc/what-is-a-merkel-cell/ on July 28, 2018.

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Patient Version. May 2, 2018. Accessed at www.cancer.gov/types/skin/patient/merkel-cell-treatment-pdq on July 23, 2018.

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Merkel Cell Carcinoma, Version 2.2018 -- June 15, 2018. Accessed at www.nccn.org/professionals/physician_gls/pdf/mcc.pdf on July 23, 2018.

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Key Statistics for Merkel Cell Carcinoma

Skin cancer is by far the most common type of cancer in the United States. Merkel cell carcinoma (MCC) is a type of skin cancer, but it's not common. About 2,000 cases of MCC are diagnosed in the United States each year.

But the number of people diagnosed with MCC each year has been rising quickly over the past few decades. Some of this is probably because lab tests to diagnose these cancers have become more accurate. But the rise in MCC might also be caused by increases in [risk factors](#)¹. For instance, people are living longer, and more people are living with weakened immune systems.

More than 4 out of 5 Americans diagnosed with MCC are older than age 70. And men are nearly 2-times more likely to have it compared with women.

MCC is much more common in white people than in people of other races. More than 9 out of 10 cases of MCC in the United States are diagnosed in whites.

For survival statistics, see [Survival Rates for Merkel Cell Carcinoma](#)².

Visit the American Cancer Society's [Cancer Statistics Center](#)³ for more key statistics.

Hyperlinks

1. www.cancer.org/cancer/merkel-cell-skin-cancer/causes-risks-prevention/risk-factors.html
2. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/survival-rates.html
3. <https://cancerstatisticscenter.cancer.org/>

References

Brady M, Spiker AM. Cancer, Skin, Merkel Cell. [Updated 2017 Dec 22]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2018 Jan.

Merkelcell.org. Seattle Multidisciplinary MCC Team, University of Washington MCC Research, Fred Hutchinson Cancer Research Center, and the Seattle Cancer Care Alliance/Skin Cancer. What is Merkel cell carcinoma? Accessed at www.merkelcell.org/about-mcc/what-is-merkel-cell-carcinoma/ on July 23, 2018.

Tetzlaff MT, Nagarajan P. Update on Merkel Cell Carcinoma. *Head Neck Pathol.* 2018;12(1):31-43.

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

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What's New in Merkel Cell Carcinoma Research?

Because Merkel cell carcinoma (MCC) is very rare, it's been hard to study it well. Most experts agree that treatment in a clinical trial should be considered for any type or stage of MCC. This way people can get the best treatment available now and may also get the treatments that are thought to be even better. The new and promising treatments discussed here are only available in clinical trials.

Causes of MCC

Researchers are learning more about the Merkel cell polyomavirus (MCV), which is found in most MCC tumors. It's not yet clear exactly how damage from UV light, infection with MCV, and changes in the body's immune system might interact to cause MCC, but this is an active area of research.

Prevention and early detection of MCC

Most skin cancers, including many MCCs, can be [prevented](#)¹. The best way to lower the number of skin cancers is to educate the public, especially parents, about [skin cancer risk factors](#)² and [warning signs](#)³. It's important for health care professionals and skin cancer survivors to remind others about the [dangers of too much UV exposure](#)⁴ (both from the sun and from man-made sources like tanning beds) and about how easy it can be to [protect your skin from UV rays](#)⁵.

[MCC can often be found early](#)⁶, when small, hasn't spread, and is most likely to be cured. Monthly skin self-exams and awareness of the warning signs of MCCs and other

skin cancers can be helpful in finding them early.

The American Academy of Dermatology (AAD) sponsors annual free skin cancer screenings throughout the country. Many local American Cancer Society offices work closely with AAD to provide volunteers for registration, coordination, and education efforts related to these free screenings. Look for information in your area about these screenings or call the [American Academy of Dermatology](#)⁷ for more information.

Treatment

While early-stage MCCs often can be cured, more advanced MCCs tend to be much harder to treat. It's been hard to study the best way to treat these cancers because they're so rare. But in recent years, doctors have begun to look at newer types of treatment for this disease.

Immunotherapy

This type of treatment helps the body's immune system attack cancer cells more effectively. Doctors have been hopeful that this approach might be useful against MCC, especially because this cancer appears to be linked to infection with a virus (MCV). And in recent years, certain immunotherapy drugs have been approved for treating MCC. Still, researchers are looking for other drugs that work with the immune system in different ways. They're also looking for better ways to use the immunotherapies available today.

Autologous T cell therapy: In this approach, immune cells called T cells are removed from a person's blood, taken to the lab, and exposed to parts of the Merkel cell polyomavirus and chemicals that help activate the T cells. The cells are then infused back into the person's body. The hope is that these reengineered cells will now seek out and attack MCC cells. This approach is still in early phases of testing.

Hormone-like drugs

MCC is a type of neuroendocrine tumor, which means its cells share features with cells that normally make hormones in the body. Doctors are testing whether drugs that affect hormone-making cells might be helpful against MCC. One example is lanreotide which is part of a group of drugs known as somatostatin analogs. Research testing these types of drugs against MCC is still in very early phases.

Targeted therapy

Newer drugs called targeted therapies may someday be shown to help treat MCC. Targeted therapies attack parts of cancer cells that make them different from normal cells. Each type of targeted therapy works differently, but they all alter the way a cancer cell grows, divides, repairs itself, or interacts with other cells. Targeted drugs are already used to treat many types of cancer, and many are now being studied for use against MCC.

Combining treatments

Studies are looking at treatment combinations that might work better against MCC that no longer responds to the usual treatments. New drug combos and new ways to use radiation with chemo and/or immunotherapy are active areas of research.

Hyperlinks

1. www.cancer.org/cancer/merkel-cell-skin-cancer/causes-risks-prevention/prevention.html
2. www.cancer.org/cancer/merkel-cell-skin-cancer/causes-risks-prevention/risk-factors.html
3. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/signs-and-symptoms.html
4. www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html
5. www.cancer.org/healthy/be-safe-in-sun.html
6. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/finding-merkel-cell-early.html
7. <https://www.aad.org/>

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

American Society of Clinical Oncology. Neuroendocrine Tumor: Latest Research. 11/2016. Accessed at www.cancer.net/cancer-types/neuroendocrine-tumor/latest-research on September 21, 2018.

Chan IS, Bhatia S, Kaufman HL, Lipson EJ. Immunotherapy for Merkel cell carcinoma: a turning point in patient care. *J Immunother Cancer*. 2018;6(1):23.

Tello TL, Coggshall K, Yom SS, Yu SS. Merkel cell carcinoma: An update and review: Current and future therapy. *J Am Acad Dermatol*. 2018;78(3):445-454.

Voelker R. Why Merkel Cell Cancer Is Garnering More Attention. *JAMA*. 2018;320(1):18-20.

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Merkel Cell Skin Cancer 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 Merkel cell carcinoma.

- [Merkel Cell Carcinoma Risk Factors](#)
- [What Causes Merkel Cell Carcinoma?](#)

Prevention

There's no sure way to prevent Merkel cell carcinoma. But there are things you can do that might help lower your risk. Learn more.

- [Can Merkel Cell Carcinoma Be Prevented?](#)
- [Skin Cancer Prevention and Early Detection¹](#)

Merkel Cell Carcinoma Risk Factors

A risk factor is anything that raises your chance of getting a disease such as cancer. Different cancers have different risk factors. Some risk factors, like smoking, weight, and sun exposure, can be controlled. Others, like your age or family history, can't be changed.

Having a risk factor for Merkel cell carcinoma (MCC), or even many risk factors, doesn't mean that you will get it. Most people with risk factors never get MCC, while others with this disease may have few or no known risk factors.

These are some known risk factors for MCC:

Merkel cell polyomavirus (MCV) infection

The Merkel cell polyomavirus (MCV) is found in the cancer cells of about 8 out of 10 people with MCC. MCV is a common virus. Most people are infected with it at some point (often as children). But the infection doesn't cause symptoms, and it rarely leads to MCC. Because of this, there are no recommended screening tests or treatments for MCV infection.

MCV was first discovered in 2008, and scientists are still learning about this virus. For example, it's not clear how exactly how it might cause MCC, or why there are so few cases of MCC when infection with MCV is very common.

Ultraviolet (UV) light exposure

[Exposure to ultraviolet \(UV\) rays¹](#) is thought to be a major risk factor for most skin cancers, including MCC. UV rays damage the DNA inside skin cells. This can lead to skin cancer when this ongoing damage affects the DNA of genes that control skin cell growth.

From the sun: Sunlight is the main source of UV rays. Most MCCs start in areas of the body often exposed to the sun, such as the face, neck, and arms. People who get a lot of sun exposure are at greater risk for MCC. UV rays make up only a very small portion of the sun's rays, but they are the main cause of the skin damage caused by the sun.

From tanning beds: Tanning beds are another source of UV rays. MCC is a rare cancer, and no studies have looked for a link between MCC and tanning bed use. But it stands to reason that more exposure to UV rays increases the risk.

From psoriasis treatments: Some patients with psoriasis (a long-lasting inflammatory skin disease) are given medicines called psoralens along with UV light treatments, this is known as PUVA treatments. This can increase the risk of MCC.

To learn more about the effects of UV rays on the skin and what you can do to protect yourself and your loved ones, see [Skin Cancer Prevention and Early Detection²](#).

Having light-colored skin

The risk of MCC is much higher for whites than for African Americans or Hispanics. Nearly all (more than 9 out of 10) MCCs are diagnosed in white people. This is probably because darker skin has a protective effect against the damaging effects of UV rays.

Being older

The risk of MCC goes up as people get older. In fact, this cancer is very rare in people under the age of 50. About 8 out of 10 people with MCC are over age 70. The increased risk may be related to skin damage caused by sun exposure over time and the fact that people's immune systems tend to become weaker as they get older.

Being male

Men are 2-times more likely than women to develop MCC. This might be because they tend to get more sun exposure.

Having a weakened immune system

The immune system defends the body against germs such as viruses. It also seems to help the body fight cancer. People with weakened immune systems (from certain diseases or medical treatments) are more likely to develop some types of cancer, including MCC.

For example, **people who get organ transplants** usually are given drugs that weaken (suppress) the immune system to help keep them from rejecting the new organ. This increases their risk of developing MCC. People with autoimmune diseases (like lupus) sometimes take medicines that suppress the immune system, which might increase their risk for other diseases.

People with HIV³, the virus that causes AIDS, often have weakened immune systems and are also at increased risk for MCC.

People with some types of blood cancers, such as [chronic lymphocytic leukemia \(CLL\)](#)⁴ or certain [lymphomas](#)⁵, also tend to have weakened immune systems. This can be from the cancer itself, or from its treatment. People with these cancers are more likely to get MCC.

MCCs in people with weakened immune systems tend to grow faster and are more

likely to be life-threatening.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html
2. www.cancer.org/cancer/skin-cancer/prevention-and-early-detection.html
3. www.cancer.org/cancer/cancer-causes/infectious-agents/hiv-infection-aids.html
4. www.cancer.org/cancer/chronic-lymphocytic-leukemia.html
5. www.cancer.org/cancer/lymphoma.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Cestaro G, Quarto G, DE Monti M, et al. New and emerging treatments for metastatic Merkel cell carcinoma. *Panminerva Med.* 2018;60(1):39-40.

Coggshall K, Tello TL, North JP, Yu SS. Merkel cell carcinoma: An update and review: Pathogenesis, diagnosis, and staging. *J Am Acad Dermatol.* 2018;78(3):433-442.

Tetzlaff MT, Nagarajan P. Update on Merkel Cell Carcinoma. *Head Neck Pathol.* 2018;12(1):31-43.

Voelker R. Why Merkel Cell Cancer Is Garnering More Attention. *JAMA.* 2018;320(1):18-20.

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What Causes Merkel Cell Carcinoma?

Although we know some of the things that can increase a person's risk of Merkel cell carcinoma (MCC), it's not clear exactly how these things might cause MCC.

Cancer is caused by changes in the DNA inside of cells. DNA in our cells makes up our genes, which control how our cells work. 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 help control when our cells grow, divide into new cells, and die:

- Genes that help cells grow, divide, and stay alive are called **oncogenes**.
- Genes that keep cell growth in check by slowing down cell division or making cells 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. Changes in many different genes are usually needed for a cell to become a cancer cell.

Researchers don't yet know all of the DNA changes that can result in MCC, but they have found that many of these cancers have changes in tumor suppressor genes.

MCC does not seem to run in families, so the DNA changes that lead to MCC are not likely passed on (inherited) from a person's parents. Instead, these changes probably happen during the person's life. Sometimes these changes might just be random events that happen inside cells, without having an outside cause. But sometimes the cause might be something specific, like long-term sun exposure or infection with the Merkel cell polyomavirus (MCV).

[Ultraviolet \(UV\) radiation¹](#) can damage the DNA inside skin cells. Sometimes this damage affects certain genes that control how and when cells grow and divide, which may be the first step on the path to cancer.

How MCV infection plays a role in the development of MCC isn't clear. But researchers have found that the virus can get inside cells and cause them to make a protein that turns off tumor suppressor genes, which might lead to MCC.

MCV infection might help explain why people with weakened immune systems have a higher risk of MCC. It might be that the virus is normally kept in check (but not killed) by the immune system. A weakened immune system could then allow the virus to grow and flourish, which in turn might raise the risk of MCC.

Scientists are looking for the specific DNA changes inside MCC cells to help explain what causes it. A better understanding of how damaged DNA leads to MCC might also be used to design better treatments for it.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Coggshall K, Tello TL, North JP, Yu SS. Merkel cell carcinoma: An update and review: Pathogenesis, diagnosis, and staging. *J Am Acad Dermatol*. 2018;78(3):433-442.

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Health Professional Version. February 1, 2018. Accessed at www.cancer.gov/types/skin/hp/merkel-cell-treatment-pdq on July 23, 2018.

Tetzlaff MT, Nagarajan P. Update on Merkel Cell Carcinoma. *Head Neck Pathol*. 2018;12(1):31-43.

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Can Merkel Cell Carcinoma Be Prevented?

Your risk of getting Merkel cell carcinoma (MCC) is low, and some risk factors for MCC, such as your age, gender, and skin color can't be controlled. Still, there are things you can do that might help lower your risk. These might also lower your risk of getting [more common types of skin cancer](#)¹, as well as some other types of cancer.

Limit your exposure to ultraviolet (UV) rays

The most important way to lower your risk of skin cancers (including MCC) is to limit your [exposure to UV rays](#)². Practice [sun safety](#)³ when you are outdoors.

Seek shade

Simply staying in the shade is one of the best ways to limit your UV exposure.

“Slip! Slop! Slap!® ... and Wrap”

This catchphrase can help you remember some of the key steps you can take to protect yourself from UV rays. If you're going to be in the sun:

- Slip on a shirt.
- Slop on sunscreen.
- Slap on a hat.
- Wrap on sunglasses to protect your eyes and the sensitive skin around them.

Don't use tanning beds or sunlamps

Many people believe the UV rays of tanning beds are harmless. This is not true. Tanning lamps give off UV rays, which can cause long-term skin damage and can contribute to skin cancer. Most skin doctors and health organizations recommend not using tanning beds and sun lamps.

Protect children from the sun

Children need special care, since they tend to spend more time outdoors and can burn more easily. Parents and other caregivers should protect children from excess sun exposure by using the steps above. Children need to be taught about the dangers of too much sun exposure as they become more independent.

Learn more about protecting yourself in the sun

For more on how to protect yourself and your family, see [Skin Cancer: Prevention and Early Detection](#)⁴.

Keep your immune system strong

Having a weakened immune system greatly increases the risk of getting MCC, as well as other types of skin cancer. In some cases, such as organ transplant, you can't control the things that must be done that weaken (suppress) your immune system. But something you can control is being infected with HIV.⁵

Infection with HIV, the virus that causes AIDS, weakens the immune system. Avoiding known risk factors for HIV infection, such as intravenous (IV) drug use and having unprotected sex with many partners, can also lower your risk of immune system problems. This, in turn, might help keep you from getting MCC and many other types of cancer. To learn more, see [HIV Infection, AIDS, and Cancer](#)⁶.

Hyperlinks

1. www.cancer.org/cancer/skin-cancer.html
2. www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html
3. www.cancer.org/healthy/be-safe-in-sun.html
4. www.cancer.org/cancer/skin-cancer/prevention-and-early-detection.html
5. www.cancer.org/cancer/cancer-causes/infectious-agents/hiv-infection-aids.html
6. www.cancer.org/cancer/cancer-causes/infectious-agents/hiv-infection-aids.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Clarke CA, Robbins HA, Tatalovich Z, et al. Risk of merkel cell carcinoma after solid organ transplantation. *J Natl Cancer Inst.* 2015;107(2):1-9.

Merkelcell.org. Seattle Multidisciplinary MCC Team, University of Washington MCC Research, Fred Hutchinson Cancer Research Center, and the Seattle Cancer Care Alliance/Skin Cancer. What immune problems make beating MCC more difficult? Accessed at merkelcell.org/resources/faqs/ on July 23, 2018.

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Merkel Cell Skin Cancer Early Detection, Diagnosis, and Staging

Detection and Diagnosis

Finding cancer early often allows for more treatment options. Some early cancers may have signs and symptoms that can be noticed, but that's not always the case.

- [Can Merkel Cell Carcinoma Be Found Early?](#)
- [Skin Cancer Prevention and Early Detection¹](#)
- [Signs and Symptoms of Merkel Cell Carcinoma](#)
- [Tests for Merkel Cell Carcinoma](#)

Stages and Outlook (Prognosis)

After a cancer diagnosis, staging provides important information about the extent of cancer in the body and the likely response to treatment.

- [Merkel Cell Carcinoma Stages](#)
- [Survival Rates for Merkel Cell Carcinoma](#)

Questions to Ask About Merkel Cell Carcinoma

Get some questions you can ask your health care team to help you better understand your diagnosis and treatment options.

- [Questions To Ask About Merkel Cell Carcinoma](#)
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Can Merkel Cell Carcinoma Be Found Early?

Merkel cell carcinoma (MCC) and many other skin cancers often can be found early, when they're small, haven't spread, and are likely to be easier to treat.

Skin self-exam

While the American Cancer Society doesn't have guidelines for the early detection of skin cancer, knowing your own skin is important in finding skin cancer early. Learn the patterns of moles, blemishes, freckles, and other marks on your skin so that you'll notice any changes.

Many doctors recommend [checking your own skin](#)¹ once a month. Self-exams are best done in a well-lit room in front of a full-length mirror. Use a hand-held mirror for areas that are hard to see, such as the backs of your thighs.

Examine all of your skin, including your palms and soles, scalp, ears, nails, and your back. To learn more about how to examine your skin, see [Skin Exams](#)². A friend or family member can also help you with these exams, especially for those hard-to-see places, like your scalp and back.

Be sure to show your doctor any skin changes that concern you and have them look at areas that may be hard for you to see. Any spots on your skin that are new or changing in size, shape, or color should be seen by a doctor right away. If you can't see your doctor soon, you might want to take good close-up photos of the area so your doctor can see if it's changing when you do get an appointment.

Any unusual sore, lump, blemish, marking, or change in the way an area of the skin looks or feels may be a sign of skin cancer or a warning that it might occur. The area might become red, swollen, scaly, crusty, or start oozing or bleeding. It may feel itchy, tender, or painful.

Merkel cell tumors usually look like firm, pink, red, or purple lumps or bumps on sun-exposed areas of the skin. They usually don't hurt, but they can grow quickly and can sometimes open up as ulcers or sores.

Exam by a health care professional

Some doctors and other health care professionals will examine your skin as part of your routine health check-ups.

Having regular skin exams is especially important for people who are at high risk of MCC or other skin cancers, such as people with reduced immunity (like those who have had an organ transplant). Talk to your doctor about your skin cancer risk and how often you should have your skin examined.

Hyperlinks

1. www.cancer.org/cancer/skin-cancer/galleries/skin-self-exam-gallery.html
2. www.cancer.org/cancer/skin-cancer/prevention-and-early-detection/skin-exams.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Merkelcell.org. Seattle Multidisciplinary MCC Team, University of Washington MCC Research, Fred Hutchinson Cancer Research Center, and the Seattle Cancer Care Alliance/Skin Cancer. Symptoms & appearance of Merkel cell carcinoma. Accessed at www.merkelcell.org/about-mcc/symptoms-and-appearance-of-merkel-cell-carcinoma/ on August 8, 2018.

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Patient Version. May 2, 2018. Accessed at www.cancer.gov/types/skin/patient/merkel-cell-treatment-pdq on August 8, 2018.

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Signs and Symptoms of Merkel Cell Carcinoma

Merkel cell carcinoma (MCC) usually starts on areas of skin exposed to the sun, especially the face, neck, arms, and legs, but it can occur anywhere on the body. It often **first appears as a single pink, red, or purple shiny bump that usually doesn't hurt**. Sometimes the skin on the top of the tumor breaks open and bleeds.

These tumors grow quickly. They might spread as new lumps in the nearby skin. They might also reach nearby [lymph nodes](#)¹ (small collections of immune system cells throughout the body). Over time, the lymph nodes might grow large enough to be seen or felt as lumps under the skin (usually in the neck or under the arm).

Merkel cell carcinoma is rare, and it can look like many other, more common types of skin cancer or other skin problems when it first appears. Because of this, doctors usually don't suspect MCC at first, and [the diagnosis is often made only after the tumor is biopsied](#).

It's very important to have any new, growing, or changing lumps, bumps, or spots on your skin checked by a doctor as soon as possible so that the cause can be found and treated, if needed. The earlier any type of skin cancer is found, the easier it might be to treat.

Hyperlinks

1. www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Brady M, Spiker AM. Cancer, Skin, Merkel Cell. [Updated 2017 Dec 22]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2018 Jan.

Cestaro G, Quarto G, DE Monti M, et al. New and emerging treatments for metastatic Merkel cell carcinoma. *Panminerva Med*. 2018;60(1):39-40.

Coggshall K, Tello TL, North JP, Yu SS. Merkel cell carcinoma: An update and review: Pathogenesis, diagnosis, and staging. *J Am Acad Dermatol*. 2018;78(3):433-442.

Merkelcell.org. Seattle Multidisciplinary MCC Team, University of Washington MCC Research, Fred Hutchinson Cancer Research Center, and the Seattle Cancer Care

Alliance/Skin Cancer. Symptoms & appearance of Merkel cell carcinoma. Accessed at www.merkelcell.org/about-mcc/symptoms-and-appearance-of-merkel-cell-carcinoma/ on August 8, 2018.

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Patient Version. May 2, 2018. Accessed at www.cancer.gov/types/skin/patient/merkel-cell-treatment-pdq on August 8, 2018.

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Tests for Merkel Cell Carcinoma

Most skin cancers, including Merkel cell carcinoma (MCC), are brought to a doctor's attention because of signs or symptoms a person is having.

If you have an abnormal area that might be skin cancer, your doctor will examine it and do tests to find out if it's cancer or some other skin problem. If MCC is diagnosed and there's a chance it has spread to other parts of your body, other tests will be needed.

Medical history and physical exam

The first step is for your provider to ask about your symptoms, such as when you first noticed the change on your skin, if it has changed in size or appearance, and if it has been painful, itchy, or bleeding. You might also be asked about your possible risk factors for skin cancer (including sun exposure and immune system problems) and if you or anyone in your family has had skin cancer.

During the physical exam, your provider will note the size, shape, color, and texture of the area(s) in question, and if it's bleeding, oozing, or crusting. The rest of your body will also be checked for spots that could be related to skin cancer.

Nearby lymph nodes, which are bean-sized collections of immune system cells under the skin will also be closely checked. MCCs (and some other skin cancers) can spread to lymph nodes. When this happens, the lymph nodes swell and might be felt as lumps under the skin.

Referral to a specialist

If you're first seen by your primary doctor and skin cancer is suspected, you may be referred to a **dermatologist**. This is a doctor who specializes in skin diseases. This doctor will look at the changed area more closely.

Along with a standard physical exam, some dermatologists use a technique called **dermatoscopy** (also called dermoscopy, epiluminescence microscopy, or surface microscopy) to see spots on the skin more clearly. The doctor uses a dermatoscope, which is a special magnifying lens and light source that's held near the skin. Sometimes a thin layer of alcohol or oil is used with this instrument. The doctor may take a digital photo of the spot, too.

Skin biopsy

If the doctor thinks that a suspicious area might be MCC (or another type of skin cancer), a tiny piece of it (called a sample) will be removed and sent to a lab. There, it's tested and looked at with a microscope. This is called a **skin biopsy**.

There are different ways to do a skin biopsy. The doctor will choose one based on the suspected type of skin cancer, where it is on your body, its size, and other factors. Different methods can result in different scars, so ask your doctor about possible scarring before the biopsy is done.

Skin biopsies are done using local anesthetic (numbing medicine), which is injected into the area with a very small needle. You'll probably feel a small prick and a little stinging as the medicine goes in, but you shouldn't feel any pain during the biopsy.

Shave (tangential) biopsy

To do this biopsy, the doctor shaves off the top layers of the skin with a small surgical blade. Any bleeding is then stopped by putting on either an ointment, a chemical that stops bleeding, or using a small electrical current to seal (cauterize) the wound.

A shave biopsy is useful in diagnosing many types of skin diseases, especially if the doctor thinks an abnormal area is not likely a serious skin cancer such as MCC or [melanoma](#)¹. A thin shave biopsy is generally not used if the doctor strongly suspects MCC (or melanoma), because the biopsy often doesn't go deep enough to get below the tumor.

Punch biopsy

For a punch biopsy, the doctor uses a tool that looks like a tiny round cookie cutter to remove a deeper sample of skin. The doctor rotates the punch biopsy tool on the skin until it cuts through all the layers of the skin. The sample is removed and the edges of the biopsy site are stitched together.

Incisional and excisional biopsies

To examine a tumor that might have grown into deeper layers of the skin, the doctor may use an incisional or excisional biopsy. For these types of biopsies, a surgical knife is used to cut through the full thickness of skin. A wedge or sliver of skin is removed, and the edges of the wound are stitched together.

An **incisional biopsy** removes only part of the tumor. An **excisional biopsy** removes the entire tumor, and is usually preferred for a suspected MCC if it can be done.

Lymph node biopsy

MCC often spreads to nearby lymph nodes early in the course of the disease, so it's very important to find out if lymph nodes contain cancer cells. If MCC has already been diagnosed on the skin, nearby lymph nodes will usually be biopsied to see if the cancer has spread to them.

The type of biopsy used depends on how likely it is that the cancer has reached the nearby lymph nodes:

- If the nearby lymph nodes feel normal on physical exams and look normal on imaging tests, a **sentinel lymph node biopsy** is likely to be done.
- If exams or imaging tests suggest that nearby lymph nodes might contain cancer (for example, if the nodes are larger than normal), then a **needle biopsy** is more likely to be done.

Sentinel lymph node biopsy (SLNB)

A [sentinel lymph node biopsy](#)² can be used to find the lymph nodes that are likely to be the first place the MCC would go if it has spread. These lymph nodes are called **sentinel nodes**.

For more on this test and what the results could mean, see [Surgery for Merkel Cell Carcinoma](#)³.

Needle biopsy

If a lymph node near an MCC tumor is abnormally large, the doctor can use a needle biopsy to find out if the cancer has spread to that node. Needle biopsies are easier than some other types of biopsies, but they may not always take out enough of a tissue sample to find cancer cells.

There are 2 main types of needle biopsies.

- In a **fine needle aspiration (FNA)** biopsy, the doctor uses a syringe with a very thin, hollow needle (thinner than the ones used for blood tests) to pull out (aspirate) cells and small pieces of tissue.
- In a **core biopsy**, a larger needle is used to remove one or more small cylinders (cores) of tissue. Core biopsies remove larger samples than FNA biopsies.

With either type of biopsy, numbing medicine (a local anesthetic) is sometimes used to numb the area first. These biopsies rarely cause much discomfort and usually don't leave a scar.

If the lymph node is just under the skin, the doctor can often feel it well enough to guide the needle into it. If the lymph node is deeper in the body, an imaging test, like an ultrasound or CT scan, is often used to guide the needle into the right place.

Surgical (excisional) lymph node biopsy

This type of biopsy might be done if a lymph node's size suggests the cancer has spread there but a needle biopsy of the node hasn't been done. An excisional biopsy might also be used if a needle biopsy didn't find any cancer cells, but the doctor still suspects the cancer has spread there.

In this type of biopsy, the doctor takes out the enlarged lymph node through a small cut (incision) in the skin. This can often be done in a doctor's office or outpatient surgical center. Numbing medicine (local anesthetic) is generally used if the lymph node is near the surface of the body, but a person may need to be sedated or even asleep (using general anesthesia) if the lymph node is deeper in the body.

Lab tests of biopsy samples

All biopsy samples will be sent to a lab, where a pathologist (a doctor who is specially trained to diagnose disease) will look at them under a microscope and do tests for MCC

(or other types of cancer). Often, skin samples are sent to a dermatopathologist, a doctor who has special training in looking at skin samples.

If the doctor can't tell for sure if the sample contains MCC just by looking at it, special lab tests may be done on the cells to try to confirm the diagnosis. One of the tests commonly used for MCC is called **immunohistochemistry (IHC)**. It looks for certain proteins on the cancer cells, such as CK-20.

If MCC is found, the pathologist will also look at certain important features such as the tumor thickness, the portion of cells that are actively dividing (mitotic rate), and whether the tumor has invaded the tiny blood vessels or lymph vessels in the sample. These features could help determine a person's outlook (prognosis).

Imaging tests

[Imaging tests](#)⁴ use x-rays, magnetic fields, or radioactive substances to create pictures of the inside of the body. They can be used to see if MCC has spread to lymph nodes or to other organs in the body.

Imaging tests can also be done to help see how well treatment is working or to look for possible signs of cancer coming back (recurring) after treatment.

Computed tomography (CT) scan

[CT scans](#)⁵ use x-rays to make detailed, cross-sectional images of your body. Unlike a regular x-ray, CT scans can show details in soft tissues (such as internal organs). This test can show if lymph nodes are enlarged or if other organs have suspicious spots, which might be from the spread of MCC.

CT-guided needle biopsy: CT scans can also be used to help guide a biopsy needle into a suspicious area deep inside the body.

Magnetic resonance imaging (MRI)

[MRIs](#)⁶ use radio waves and strong magnets instead of x-rays to create detailed images of the inside of your body. This test is very helpful in looking for cancer that has spread to the brain and/or spinal cord.

Positron emission tomography (PET) scan

A [PET](#)⁷ scan can help show if the cancer has spread to lymph nodes or other parts of the body. This test looks for areas where cells are growing quickly (which might be a sign of cancer), rather than just showing if areas look abnormal based on their size or shape.

PET/CT scan: Often a PET scan is combined with a CT scan using a special machine that can do both at the same time. This lets the doctor compare areas of higher radioactivity on the PET scan with the more detailed pictures of that area on the CT scan. This is the type of imaging scan most preferred in patients with MCC.

Hyperlinks

1. www.cancer.org/cancer/melanoma-skin-cancer.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html
3. www.cancer.org/cancer/merkel-cell-skin-cancer/treating/surgery.html
4. www.cancer.org/treatment/understanding-your-diagnosis/tests/imaging-radiology-tests-for-cancer.html
5. www.cancer.org/treatment/understanding-your-diagnosis/tests/ct-scan-for-cancer.html
6. www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html
7. www.cancer.org/treatment/understanding-your-diagnosis/tests/nuclear-medicine-scans-for-cancer.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

American Society of Clinical Oncology. Neuroendocrine Tumor: Diagnosis. 11/2016. Accessed at www.cancer.net/cancer-types/neuroendocrine-tumor/diagnosis on August 8, 2018.

Brady M, Spiker AM. Cancer, Skin, Merkel Cell. [Updated 2017 Dec 22]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2018 Jan.

Coggshall K, Tello TL, North JP, Yu SS. Merkel cell carcinoma: An update and review: Pathogenesis, diagnosis, and staging. *J Am Acad Dermatol*. 2018;78(3):433-442.

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Merkel Cell Carcinoma, Version 2.2018 -- June 15, 2018. Accessed at www.nccn.org/professionals/physician_gls/pdf/mcc.pdf on August 8, 2018.

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Merkel Cell Carcinoma Stages

After someone is diagnosed with Merkel cell cancer (MCC), doctors will try to figure out if it has spread, and if so, how far. This process is called **staging**. The stage of a cancer describes how much cancer is in the body. It helps determine how serious the cancer is and how best to [treat it](#)¹. Doctors also use a cancer's stage when talking about survival statistics.

The earliest stage Merkel cell cancers are called stage 0 (or carcinoma in situ), and then range from stages I (1) through IV (4). As a rule, the lower the number, the less the cancer has spread. A higher number, like stage IV, means cancer has spread more. And within a stage, an earlier letter means a lower stage. Although each person's cancer experience is unique, cancers with similar stages tend to have a similar outlook and are often treated in much the same way.

How is the stage determined?

The staging system most often used for Merkel cell cancer is the American Joint Committee on Cancer (AJCC) **TNM** system, which is based on 3 key pieces of information:

- The extent (size) of the tumor (**T**): How large is the cancer? Has it grown into nearby structures or organs?
- The spread to nearby lymph nodes (**N**): Has the cancer spread to nearby lymph nodes?
- The spread (metastasis) to distant sites (**M**): Has the cancer spread to distant lymph nodes or distant organs such as the lungs and skin?

The system described below is the most recent AJCC system as of January 2018.

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced. Once a person's T, N, and M categories have been determined, this information is combined in a process called stage grouping to get an overall stage. For more on this, see [Cancer Staging](#)².

The staging system in the table below uses the **pathologic stage** (also called the **surgical stage**). This is the staging system most often used for MCC. It's decided after testing the tissue taken out during [an operation](#)³.

Sometimes, if surgery can't be done right away or at all, the cancer will be given a **clinical stage** instead. This is based on the results of a [physical exam, biopsy, and imaging tests](#). The clinical stage will be used to help plan treatment. In some cases, though, the cancer has spread further than the clinical stage estimates, and may not predict the patient's outlook as well as a pathologic stage. Clinical staging for MCC follows a separate staging system that's not covered in the table below. If your cancer has been clinically staged, ask your doctor for information about your specific stage.

Cancer staging can be complex, so ask your doctor to explain it to you in a way you understand.

AJCC Stage	Stage grouping	Stage description*
0	Tis	The cancer is only in the epidermis, the outermost skin layer (Tis).
	N0	It has not spread to nearby lymph nodes (N0) or distant sites (M0).
	M0	This stage is also known as carcinoma in situ (Tis).
I	T1	The cancer is no more than 2 centimeters (cm) across (about 4/5 inch).
	N0	It has not spread to nearby lymph nodes (N0) or to distant sites (M0).
	M0	
IIA	T2 or T3	The cancer is more than 2, but less than 5 cm (about 2 inches) across (T2) OR the tumor is more than 5 cm across (T3).
	N0	It has not spread to nearby lymph nodes (N0) or to distant sites (M0).
	M0	

IIB	T4 N0 M0	The cancer has grown into nearby tissues such as muscles, bones, or cartilage (T4). It has not spread to nearby lymph nodes (N0) or to distant sites (M0).
IIIA	T1, T2, T3, or T4 N1a(sn) or N1a M0	The cancer can be any size or may have grown into nearby tissues (T1, T2, T3, or T4) AND the cancer has spread to nearby lymph nodes, but this was found during a lymph node biopsy or surgery and was not seen on exams or imaging tests (N1a[sn] or N1a). It has not spread to distant sites (M0).
	OR T0 N1b M0	There's no sign of a primary cancer (T0) AND the cancer has spread to nearby lymph nodes, which was seen on exams or imaging tests and then confirmed by biopsy or surgery (N1b). It has not spread to distant sites (M0).
IIIB	T1, T2, T3, or T4 N1b, N2 or N3 M0	The cancer can be any size or may have grown into nearby tissues (T1, T2, T3, or T4) AND any of the following: <ul style="list-style-type: none"> • It has spread to nearby lymph nodes, which was seen on exams or imaging tests and then confirmed by biopsy or surgery (N1b). • It has spread toward a nearby lymph node area without reaching the lymph nodes (N2). This is called <i>in transit metastasis</i>. • It has spread toward a nearby lymph node area (called in transit metastasis) and has reached the lymph nodes (N3). It has not spread to distant sites (M0).
IV	T0, T1, T2, T3 or T4 Any N M1	The cancer can be any size or may have grown into nearby tissues (T0, T1, T2, T3, or T4) AND might or might not have spread to nearby lymph nodes (Any N). It has spread to distant lymph nodes or organs, such as the lungs or skin (M1).

* The following categories are not listed on the table above:

- **TX:** Main tumor cannot be assessed due to lack of information.
- **T0:** No evidence of a primary tumor.
- **NX:** Regional lymph nodes cannot be assessed due to lack of information.

Hyperlinks

1. www.cancer.org/cancer/merkel-cell-skin-cancer/treating/common-treatments-by-extent.html
2. www.cancer.org/treatment/understanding-your-diagnosis/staging.html
3. www.cancer.org/cancer/merkel-cell-skin-cancer/treating/surgery.html

References

American Joint Committee on Cancer. Merkel Cell Carcinoma. In: *AJCC Cancer Staging Manual*. 8th ed. New York, NY: Springer; 2017:549.

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

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Survival Rates for Merkel Cell Carcinoma

Survival rates can give you an idea of what percentage of people with the same type and stage of cancer are still alive a certain amount of time (usually 5 years) after they were diagnosed. They can't tell you how long you will live, but they may help give you a better understanding of how likely it is that your treatment will be successful.

Keep in mind that survival rates are estimates and are often based on previous

outcomes of large numbers of people who had a specific cancer, but they can't predict what will happen in any particular person's case. These statistics can be confusing and may lead you to have more questions. Talk with your doctor about how these numbers may apply to you, as he or she is familiar with your situation.

What is a 5-year relative survival rate?

A **relative survival rate** compares people with the same type and stage of cancer to people in the overall population. For example, if the **5-year relative survival rate** for a specific stage of Merkel cell carcinoma (MCC) is 70%, it means that people who have that cancer are, on average, about 70% as likely as people who don't have that cancer to live for at least 5 years after being diagnosed.

Where do these numbers come from?

The American Cancer Society relies on information from the SEER* database, maintained by the National Cancer Institute (NCI), to provide survival statistics for different types of cancer.

The SEER database tracks 5-year relative survival rates for Merkel cell carcinoma in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers by [AJCC TNM stages](#) (stage 1, stage 2, stage 3, etc.). Instead, it groups cancers into localized, regional, and distant stages:

- **Localized:** There is no sign that the cancer has spread outside of the skin where it started. This would include AJCC stage I (1) and stage IIA (2A) cancers.
- **Regional:** The cancer has spread outside the skin where it started to nearby structures or lymph nodes. This would include stage IIB (2B) and stage III (3) cancers in the AJCC system.
- **Distant:** The cancer has spread to distant parts of the body, such as the lungs, liver, or distant parts of the skin. This would include stage IV (4) cancers.

5-year relative survival rates for Merkel cell carcinoma

(Based on people diagnosed with MCC between 2008 and 2014.)

SEER stage	5-year relative survival rate
Localized	78%

Regional	51%
Distant	17%
All SEER stages combined	63%

Understanding the numbers

- **These numbers apply only to the stage of the cancer when it is first diagnosed.** They do not apply later on if the cancer grows, spreads, or comes back after treatment.
- **These numbers don't take everything into account.** Survival rates are grouped based on how far the cancer has spread. But other factors, such as your age and overall health, where on the body the cancer starts, and how well the cancer responds to treatment, can also affect your outlook.
- **People now being diagnosed with MCC may have a better outlook than these numbers show.** Treatments improve over time, and these numbers are based on people who were diagnosed and treated at least five years earlier.

*SEER = Surveillance, Epidemiology, and End Results

References

Noone AM, Howlader N, Krapcho M, Miller D, Brest A, Yu M, Ruhl J, Tatalovich Z, Mariotto A, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). SEER Cancer Statistics Review, 1975-2015, National Cancer Institute. Bethesda, MD, https://seer.cancer.gov/csr/1975_2015/, based on November 2017 SEER data submission, posted to the SEER web site, April 2018.

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Questions To Ask About Merkel Cell Carcinoma

It's important to have honest, open discussions with your doctor. You should feel comfortable asking any question, no matter how small it might seem. Here are some questions you might want to ask:

When you're told you have Merkel cell carcinoma

- How sure are you about my diagnosis of Merkel cell carcinoma (MCC) ?
- Has the cancer spread beneath the skin? Has it spread to lymph nodes or other organs?
- Do I need a [sentinel lymph node biopsy](#) to look for cancer in the lymph nodes?
- Will I need any other tests before we can decide on treatment?
- What is the stage of my MCC?
- Do I need to see any other types of doctors?
- Who can talk to me about costs and insurance coverage for my diagnosis and treatment?

When deciding on a treatment plan

- How much experience do you have treating MCC?
- What are my [treatment options](#)¹? What do you recommend? Why?
- Should I get a [second opinion](#)²? Can you recommend a doctor or cancer center?
- What's the goal of treatment?
- How quickly do we need to decide on treatment?
- What should I do to be ready for treatment?
- How long will treatment last? What will it be like? Where will it be done?
- What risks or side effects I should expect? How long are they likely to last?
- Will I have a scar after treatment? What will it look like?
- How might treatment affect my daily activities? My work? My sex life?
- What are the chances of the cancer will still grow or come back after the treatment options we've discussed? What would we do if that happens?
- What type of [follow-up](#)³ will I need after treatment?

During treatment

Once treatment starts, you'll need to know what to expect and what to look for. All of these questions might not apply to you, but getting answers to the ones that do may be helpful.

- How will we know if treatment is working?
- Is there anything I can do to help [manage side effects](#)⁴?
- What symptoms or side effects should I tell you about right away?
- How can I reach you on nights, holidays, or weekends?
- Are there any limits on what I can do?
- Can you suggest a mental health professional I can see if I start to feel overwhelmed, depressed, or distressed?

After treatment

- What symptoms should I watch for?
- What are the chances of the cancer coming back?
- What are my chances of developing another skin cancer?
- Should I take special precautions to avoid the sun?
- What type of [follow-up](#)⁵ will I need after treatment?
- How will we know if the cancer has come back? What would my options be if that happens?
- Are my family members at risk for skin cancer? What should I tell them to do?

Along with these sample questions, be sure to write down some of your own. For instance, you might want more information about recovery times so you can plan your work or activity schedule. Or you may want to ask about [clinical trials](#)⁶ that might be right for you.

Keep in mind that your doctor isn't the only one who can give you information. Other health care professionals, such as nurses and social workers, may have the answers to some of your questions. You can learn more about speaking with your health care team in [The Doctor-Patient Relationship](#)⁷.

Hyperlinks

1. www.cancer.org/cancer/merkel-cell-skin-cancer/treating.html

2. www.cancer.org/treatment/finding-and-paying-for-treatment/choosing-your-treatment-team/seeking-a-second-opinion.html
3. www.cancer.org/cancer/merkel-cell-skin-cancer/after-treatment/living-as-a-merkel-cell-carcinoma-survivor.html
4. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html
5. www.cancer.org/cancer/merkel-cell-skin-cancer/after-treatment/living-as-a-merkel-cell-carcinoma-survivor.html
6. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
7. www.cancer.org/treatment/understanding-your-diagnosis/talking-about-cancer/the-doctor-patient-relationship.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

American Society of Clinical Oncology. Neuroendocrine Tumor: Questions to Ask the Doctor. 11/2016. Accessed at www.cancer.net/cancer-types/neuroendocrine-tumor/questions-ask-doctor on August 10, 2018.

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Treating Merkel Cell Skin Cancer

How is Merkel cell skin cancer treated?

Based on the stage of the cancer and other factors, your treatment options might include:

- [Surgery for Merkel Cell Carcinoma](#)
- [Radiation Therapy for Merkel Cell Carcinoma](#)
- [Chemotherapy for Merkel Cell Carcinoma](#)
- [Immunotherapy for Merkel Cell Carcinoma](#)

Common treatment approaches

Sometimes more than one type of treatment is used. Your treatment options will depend on the stage (extent) of the cancer, as well as other factors such as your overall health and personal preferences.

- [Treating Merkel Cell Carcinoma Based on the Extent of the Cancer](#)

Who treats Merkel cell skin cancer?

Depending on your options, you may have different types of doctors on your treatment team. These doctors may include:

- A **dermatologist**: a doctor who treats diseases of the skin
- A **surgical oncologist (or oncologic surgeon)**: a doctor who uses surgery to treat cancer
- A **medical oncologist**: a doctor who treats cancer with medicines such as chemotherapy and immunotherapy.

- A **radiation oncologist**: a doctor who treats cancer with radiation therapy

Many other specialists may be involved in your care as well, including nurse practitioners, nurses, psychologists, social workers, rehabilitation specialists, and other health professionals.

- [Health Professionals Associated With Cancer Care¹](#)

Making treatment decisions

It's important to talk with your treatment team about all of your treatment options as well as their possible side effects. This will help you make the decision that best fits your needs. Some important things to think about include:

- Your age and overall health
- The stage (extent) of the cancer
- Where the tumor is
- The likelihood that treatment will cure the cancer (or help in some other way)
- Your feelings about the possible side effects from treatment

If there's anything you don't understand, ask to have it explained.

MCC is rare, so most doctors are unlikely to have seen or treated many cases. Even at major medical centers, where doctors are more likely to have experience with MCC, not all doctors agree on the best way to treat these cancers. If time allows, getting a second opinion from a team of experts may be a good idea. It can give you more information and help you feel good about the treatment plan that you choose.

- [Questions To Ask About Merkel Cell Carcinoma²](#)
- [Seeking a Second Opinion³](#)

Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the-art cancer treatment. In some cases they may be the only way to get access to newer treatments. They are also the best way for doctors to learn better methods to treat cancer. Still, they're not right for everyone.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials.

- [Clinical Trials](#)⁴

Considering complementary and alternative methods

You may hear about alternative or complementary methods that your doctor hasn't mentioned to treat your cancer or relieve symptoms. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods refer to treatments that are used along with your regular medical care. Alternative treatments are used instead of a doctor's medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be harmful.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision.

- [Complementary and Alternative Medicine](#)⁵

Help getting through cancer treatment

Your cancer care team will be your first source of information and support, but there are other resources for help when you need it. Hospital- or clinic-based support services are an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also has programs and services – including rides to treatment, lodging, and more – to help you get through treatment. Call our National Cancer Information Center at 1-800-227-2345 and speak with one of our trained specialists.

- [Find Support Programs and Services in Your Area](#)⁶

Choosing to stop treatment or choosing no treatment at all

For some people, when treatments have been tried and are no longer controlling the

cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.

Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it's important to talk to your doctors and you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

- [If Cancer Treatments Stop Working](#)⁷
- [Palliative or Supportive Care](#)⁸

The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask him or her questions about your treatment options.

Surgery for Merkel Cell Carcinoma

Surgery is the main treatment for most Merkel cell carcinomas (MCCs). Different types of surgery might be done, depending on each person's situation.

Surgery to diagnose or help stage the cancer

Some sort of surgery is needed to diagnose MCC or find out if it has spread.

In many cases, a skin biopsy is done to remove a suspicious spot even before the doctor suspects it might be MCC (see [Tests for Merkel cell carcinoma](#)¹). This can be thought of as a type of surgery, but it's not enough surgery to treat MCC. If MCC is diagnosed from the biopsy, a wide excision (described below) is used to remove more skin and other nearby tissues.

Even in people who have MCC with no obvious spread to nearby [lymph nodes](#)² (or

distant organs), about 1 out of 3 have cancer cells in their lymph nodes when the nodes are looked at with a microscope. Because of this, a **sentinel lymph node biopsy** (described in [Tests for Merkel Cell Carcinoma³](#)) is a very important part of determining the stage of the cancer. The results of the SLNB are also helpful when making treatment plans and discussing outcomes.

It's important that the SLNB be done before a wide excision is used to remove more skin and other tissues from the main tumor site. This helps ensure the lymph drainage is intact so the results of the SLNB are accurate.

If the SLNB is negative (the sentinel nodes do not contain cancer cells), no more lymph node surgery is needed because it's very unlikely the cancer would have spread beyond this point. (But [radiation therapy](#) might still be given to the nearby lymph nodes just in case.)

If cancer cells are found in the sentinel node(s), the other nearby lymph nodes are often taken out and checked, too. This is called a *lymph node dissection* (see below). Radiation might be given to the area after the lymph node dissection. (Sometimes radiation might be used instead of doing a lymph node dissection.)

Surgery to treat the cancer

Wide excision

When a diagnosis of MCC is made by skin biopsy, the tumor site will most likely need to be surgically cut out (excised) to help make sure the cancer has been removed completely. This surgery might cure MCC if it hasn't spread beyond the skin.

Drugs to numb the area (local anesthesia) are put into the skin with a small needle (injected) to numb it before the excision. The surgeon then cuts out the tumor, along with some of the normal skin at the edges (including under the tumor). The normal, healthy skin around the edges of the cancer is called the margin. The skin is stitched back together afterward. This will leave a scar.

The removed tissue sample is then sent to a lab, where it's tested and checked with a microscope to make sure that no cancer cells are at the edges of the skin that was removed.

Wide excision differs from an excisional biopsy used to diagnose MCC. The margins are wider (usually at least 1/2 inch). This is because the diagnosis is already known, and the doctor is trying to be sure all of the cancer cells are removed.

The margins can also vary based on where the cancer is and other factors. For instance, if MCC is on the face, the margins may be smaller to avoid large scars or other problems. Smaller margins may increase the risk of the cancer coming back, so be sure to discuss the options with your doctor.

In rare cases, where the cancer is on a finger or toe and has grown deep into the skin, the treatment might mean all or part of that digit needs to be removed (amputated).

Mohs micrographic surgery

Mohs surgery is sometimes used when the goal is to save as much healthy skin as possible, such as with cancers around the eye. It's done by a doctor with special training.

Using the Mohs technique, the doctor removes the tumor and a margin of normal-looking skin and then checks it under a microscope. If cancer cells are seen at the edges of the removed tissue (the sample), another layer of skin is removed and examined. This is repeated until the skin samples do not have cancer cells in them. This process is slow, often taking several hours, but it allows the doctor to save the normal skin near the tumor.

Lymph node dissection

MCC often spreads to nearby lymph nodes . If cancer is found in the nearby lymph nodes (on a sentinel lymph node biopsy or any other type of biopsy), a lymph node dissection is usually done.

In this operation, the surgeon removes all of the lymph nodes near the primary tumor. For instance, if the MCC is found on an arm, the surgeon would remove the underarm (axillary) lymph nodes on that side of the body. These nodes are where cancer cells would be most likely to travel first.

This type of surgery is done in an operating room where drugs are used to put you into a deep sleep (general anesthesia). As with any major operation, complications can include reactions to anesthesia, bleeding, blood clots, and infections. Most people will have soreness or pain for some time after surgery. This can be helped with medicines, if needed.

A full lymph node dissection can cause some long-term side effects. One of the most troublesome is called lymphedema. Lymph nodes in the groin or under the arm normally help drain fluid from the limbs. If they are removed, fluid could build up. This can cause

limb swelling, which may or may not go away. If severe enough, it can cause skin problems and an increased risk of infections in the limb. (Sentinel lymph node biopsy is less likely to cause this problem.) For more on this, see our section on [Lymphedema](#)⁴.

Skin grafting and reconstructive surgery

After removing large skin cancers, it may not be possible to stretch the nearby skin enough to stitch the edges of the wound together. In these cases, healthy skin may be taken from another part of the body and grafted over the wound to help it heal and look better after surgery. Other reconstructive surgical procedures can also be helpful in some cases.

Hyperlinks

1. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/how-diagnosed.html
2. www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html
3. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/how-diagnosed.html
4. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/lymphedema.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Brady M, Spiker AM. Cancer, Skin, Merkel Cell. [Updated 2017 Dec 22]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2018 Jan.

Cestaro G, Quarto G, DE Monti M, et al. New and emerging treatments for metastatic Merkel cell carcinoma. *Panminerva Med.* 2018;60(1):39-40.

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Health Professional Version. February 1, 2018. Accessed at www.cancer.gov/types/skin/hp/merkel-cell-treatment-pdq on August 15, 2018.

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Merkel Cell Carcinoma, Version 2.2018 -- June 15, 2018.

Accessed at www.nccn.org/professionals/physician_gls/pdf/mcc.pdf on August 15, 2018.

Tello TL, Coggshall K, Yom SS, Yu SS. Merkel cell carcinoma: An update and review: Current and future therapy. *J Am Acad Dermatol*. 2018;78(3):445-454.

Tetzlaff MT, Nagarajan P. Update on Merkel Cell Carcinoma. *Head Neck Pathol*. 2018;12(1):31-43.

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Radiation Therapy for Merkel Cell Carcinoma

Radiation therapy uses high-energy rays (like x-rays) or particles (such as electrons) to kill cancer cells. The radiation is focused from outside the body onto the tumor.

When might radiation therapy be used?

Not all doctors agree on exactly when radiation therapy should be used for Merkel cell carcinoma (MCC), but it works very well for MCC. It might be used in these situations:

- To treat the area of the main (primary) skin tumor after surgery to try to kill any cancer cells that might have been left behind. (You may hear this called adjuvant radiation.) This is especially important if there's a high chance that the cancer will come back (such as if the main tumor was large, or if the doctor isn't sure it was all taken out).
- To treat the main tumor if surgery isn't an option, such as if a person isn't healthy enough for surgery or the tumor is in a place where all of it can't be removed.
- To treat the lymph nodes near the main tumor. If a [sentinel lymph node biopsy](#)¹ (or other type of biopsy) found cancer in the lymph nodes, if the results of the biopsy were not clear, or if a biopsy wasn't done, radiation therapy is often given to the

lymph nodes in the area. This might be done after a [lymph node dissection](#), or it might even be done instead of a lymph node dissection.

- To help treat MCC that has come back (recurred) after surgery, either in the skin or lymph nodes.
- To help treat MCC that has spread to distant parts of the body, often along with other treatments. In this case, the radiation is used to help shrink or slow the growth of the cancer and/or to help ease symptoms caused by its spread, but it's not expected to cure the cancer.

How is radiation therapy given?

When used to treat MCC, radiation is usually given 5 days a week for many weeks. The length of treatment might be shorter if the radiation is being used to relieve symptoms caused by cancer spread.

Before treatments start, your radiation team will take careful measurements to decide the proper dose of radiation and know exactly where to aim the radiation beams. This planning session is called **simulation**.

Getting radiation treatment is a lot like getting an x-ray, but the radiation is stronger and aimed precisely at the cancer. The treatments don't hurt. Each one lasts only a few minutes, though the set-up time – getting you into place for treatment – takes longer.

Possible side effects of radiation therapy

Common side effects depend on where the radiation is aimed and can include:

- Sunburn-like skin problems
- [Changes in skin color](#)²
- [Hair loss](#)³ where the radiation enters the body
- [Fatigue](#)⁴
- [Nausea](#)⁵ (if the radiation is aimed at the abdomen)

These often get worse as treatment goes on and slowly go away after treatment ends.

Radiation therapy can also raise the risk of getting another type of cancer in the treated area. If this happens, it's usually many years after treatment.

To learn a lot more about this treatment and its side effects, see the [Radiation Therapy](#)⁶ section of our website.

Hyperlinks

1. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/how-diagnosed.html
2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/skin-problems/skin-color-changes.html
3. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/hair-loss.html
4. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fatigue.html
5. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/nausea-and-vomiting.html
6. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/radiation.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Cestaro G, Quarto G, DE Monti M, et al. New and emerging treatments for metastatic Merkel cell carcinoma. *Panminerva Med.* 2018;60(1):39-40.

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Patient Version. May 2, 2018. Accessed at www.cancer.gov/types/skin/patient/merkel-cell-treatment-pdq on August 15, 2018.

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Merkel Cell Carcinoma, Version 2.2018 -- June 15, 2018. Accessed at www.nccn.org/professionals/physician_gls/pdf/mcc.pdf on August 15, 2018.

Patel P, Modi C, McLellan B, Ohri N. Radiotherapy for inoperable Merkel cell carcinoma: a systematic review and pooled analysis. *Dermatol Pract Concept.* 2018;8(2):149-157.

Tetzlaff MT, Nagarajan P. Update on Merkel Cell Carcinoma. *Head Neck Pathol.* 2018;12(1):31-43.

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Chemotherapy for Merkel Cell Carcinoma

Chemotherapy (chemo) uses anti-cancer drugs that are most commonly given into a vein (IV) or given by mouth. These drugs travel through the bloodstream to all parts of the body. This makes chemo useful for treating cancers that have spread to other organs.

Chemo is most likely to be helpful for MCC that has spread to other organs. So far it's not clear if it can be helpful for cancers that are still just in the skin or that have only spread to nearby lymph nodes. Still, some doctors might still recommend it for these cancers.

Which chemo drugs are used to treat MCC?

Merkel cell carcinoma (MCC) is rare, so it's been hard to study the use of chemotherapy for MCC in clinical trials. Because of this, doctors often use chemo drugs that have been helpful in treating other types of fast-growing neuroendocrine tumors. The most commonly used drugs for MCCs that have spread include:

- Cisplatin
- Carboplatin
- Etoposide
- Topotecan

Most often, either cisplatin or carboplatin is used, often along with etoposide. Topotecan tends to have fewer serious side effects, so it might be a better option for some people who are older or have serious health problems.

Another combination of drugs that may be used is called CAV, which stands for

cyclophosphamide, doxorubicin, and vincristine.

These drugs are given intravenously (IV or into a vein), usually once every few weeks. They can often shrink MCC tumors for a time (or at least slow their growth and spread) and help relieve some symptoms. But these cancers tend to start growing again, even while you're getting chemo.

Possible side effects of chemotherapy for MCC

Chemo drugs can cause side effects. These depend on the type and dose of the drugs given and how long they are used. Common side effects can include:

- [Hair loss](#)¹
- [Mouth sores](#)²
- [Loss of appetite](#)³
- [Nausea and vomiting](#)⁴
- [Diarrhea or constipation](#)⁵
- [Increased risk of infection](#)⁶ (from having too few white blood cells)
- [Easy bruising or bleeding](#)⁷ (from having too few blood platelets)
- [Fatigue](#)⁸ (from having too few red blood cells)

These side effects usually go away over time once treatment is finished. Some drugs can have other effects that are not listed here, so be sure to talk with your cancer care team about what to expect.

There are often ways to lessen these side effects. For example, drugs can help prevent or reduce nausea and vomiting. Tell your cancer care team about any side effects or changes you notice while getting chemo so they can be treated right away, before they get worse.

To learn more, see [Chemotherapy](#)⁹.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/hair-loss.html
2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/mouth-problems/mouth-sores.html
3. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/mouth-problems/mouth-sores.html

- [effects/eating-problems/poor-appetite.html](#)
4. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/nausea-and-vomiting.html
 5. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/stool-or-urine-changes.html
 6. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/infections.html
 7. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/low-blood-counts/bleeding.html
 8. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fatigue.html
 9. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Merkel Cell Carcinoma, Version 2.2018 -- June 15, 2018. Accessed at www.nccn.org/professionals/physician_gls/pdf/mcc.pdf on August 15, 2018.

Tello TL, Coggshall K, Yom SS, Yu SS. Merkel cell carcinoma: An update and review: Current and future therapy. *J Am Acad Dermatol*. 2018;78(3):445-454.

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Immunotherapy for Merkel Cell

Carcinoma

Immunotherapy is the use of medicines that help a person's own immune system find and destroy cancer cells. This is a promising new form of treatment for Merkel cell carcinoma (MCC), especially if it has spread to other parts of the body.

Immune checkpoint inhibitors

An important part of the immune system is its ability to keep itself from attacking normal cells in the body. To do this, it uses "checkpoints." These are proteins on immune cells that need to be turned on (or off) to start an immune response. Cancer cells sometimes use these checkpoints to keep the immune system from attacking them.

For example, PD-1 is a checkpoint protein on immune cells called T cells. It normally acts as an "on/off switch" that can help keep the T cells from attacking other cells in the body. It switches "off" when it attaches to PD-L1, a protein on some normal (and cancer) cells. This tells the T cell to leave the other cell alone. Some cancer cells have large amounts of PD-L1, which helps keep the immune system from attacking them.

Drugs that block either PD-1 or PD-L1 can stop this binding and boost the immune response against cancer cells. Examples of such drugs include:

- **Avelumab (Bavencio[®])**, which targets PD-L1
- **Pembrolizumab (Keytruda[®])** and **nivolumab (Opdivo[®])**, which block PD-1

These drugs are given as an intravenous (IV) infusion into a vein. They're usually given every 2 or 3 weeks. They've been shown to shrink or slow the growth of some advanced MCC tumors, sometimes even after other treatments have not worked.

Other immune checkpoint inhibitors are being studied for use against MCC as well.

Possible side effects of immunotherapy for MCC

Side effects of these types of drugs can include:

- Fatigue
- Cough
- Nausea

- Rash or itchy skin
- Joint pain
- Loss of appetite
- Diarrhea
- Constipation

Other, more serious side effects occur less often:

Infusion reactions: Some people might have an infusion reaction while getting one of these drugs. This is like an allergic reaction. It can include fever, chills, flushing of the face, rash, itchy skin, wheezing, and trouble breathing. You might be given medicines before each infusion to help lower the risk of this happening.

Autoimmune reactions: These drugs work by basically removing the brakes on the body's immune system. Sometimes the immune system starts attacking other parts of the body, which can cause serious or even life-threatening problems in the lungs, intestines, liver, hormone-making glands, kidneys, or other organs.

It's very important to report any changes or new side effects to your health care team right away. If serious side effects do occur, treatment may need to be stopped.

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

Chan IS, Bhatia S, Kaufman HL, Lipson EJ. Immunotherapy for Merkel cell carcinoma: a turning point in patient care. *J Immunother Cancer*. 2018;6(1):23.

Merkelcell.org. Seattle Multidisciplinary MCC Team, University of Washington MCC Research, Fred Hutchinson Cancer Research Center, and the Seattle Cancer Care Alliance/Skin Cancer. *Immunotherapy*. Accessed at www.merkelcell.org/treatment/immunotherapy/ on Sept. 19, 2018.

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Health Professional Version. February 1, 2018. Accessed at www.cancer.gov/types/skin/hp/merkel-cell-treatment-pdq on Sept. 19, 2018.

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Merkel Cell Carcinoma, Version 2.2018 -- June 15, 2018. Accessed at www.nccn.org/professionals/physician_gls/pdf/mcc.pdf on Sept. 19, 2018.

Uchi H. Merkel Cell Carcinoma: An Update and Immunotherapy. *Front. Oncol.* 2018;8(48):1-5.

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Treating Merkel Cell Carcinoma Based on the Extent of the Cancer

Merkel cell carcinoma (MCC) is rare, so it has been hard for doctors to study how best to treat this cancer. Some doctors might suggest treatments other than those listed here.

Treatment depends mainly on how far the [cancer has spread](#)¹, so having the right [tests done to determine the extent of the cancer](#)² (such as a sentinel lymph node biopsy or imaging tests like CT, MRI, or PET/CT scans) is very important.

Other factors, such as the location of the tumor, your age, and your overall health, might also affect your treatment options.

MCC with no obvious spread to the lymph nodes (or elsewhere)

These cancers are thought to be confined to the skin based on physical exams and imaging tests. Once MCC has been diagnosed, a sentinel lymph biopsy (SLNB) is usually done first to see if small amounts of cancer have reached the nodes.

After the SLNB, surgery (usually wide local excision) is done on the skin to try to remove all of the cancer. If the cancer is in a place where it would be hard to remove it with a wide margin (edge) of normal skin, Mohs micrographic surgery might be used. Radiation therapy might be another option instead of surgery for some people.

Within a few weeks after surgery, radiation might be given to the site where the tumor was removed. This is more likely if the doctor thinks there's a higher risk of the cancer

coming back (such as if the main tumor was large, or if the doctor isn't sure if it was all removed).

If a SLNB was done and did not find any cancer in the lymph nodes, some doctors might suggest watching you closely with no further treatment, especially if the main tumor was small and did not have any concerning features. But because MCC often spreads to the lymph nodes, many doctors prefer to give radiation therapy to the nodes to be safe. Radiation to the nodes is also likely to be recommended if SLNB was not done, or if it was done but the results were not clear. (If radiation therapy is being given to the main tumor, the radiation to the lymph nodes is typically given at the same time.)

MCC that has spread to nearby lymph nodes

These cancers have spread to the nearby lymph nodes, and it has been confirmed either with a SLNB or with another type of biopsy.

The main tumor on the skin is treated with surgery (usually wide local excision) to try to remove all of the cancer. If the cancer is in a place where removing it with a wide margin of normal skin would be difficult, Mohs micrographic surgery might be used.

Within a few weeks after surgery, radiation therapy is often given to the site where the tumor was removed, especially if the doctor thinks there is a higher risk of the cancer coming back (such as if the main tumor was large, or if the doctor is not sure if it was all removed).

Lymph nodes with cancer cells need to be treated as well. Options might include [lymph node dissection](#) to remove them, radiation therapy, or lymph node dissection followed by radiation therapy. (If radiation therapy is being given to the main tumor, the radiation to the lymph nodes is typically given at the same time.) Some doctors might also recommend chemotherapy to try to lower the chances of the cancer coming back, but it's not clear how helpful this is.

MCC that has spread to other parts of the body

If MCC has spread to other parts of the body, treatment can often help control the cancer and ease symptoms, but these cancers are very hard to get rid of completely. Not all doctors agree on the best way to treat these cancers, so if time permits it's often a good idea to get a [second opinion](#)³ from a team of experts.

Treatment options might include surgery, radiation therapy, chemotherapy, immunotherapy, or some combination of these. The benefits of each treatment need to

be weighed against the side effects they might cause. Be sure you understand the goal of each treatment and its possible downsides before starting treatment.

MCC often shrinks in response to chemotherapy at first, but almost always starts growing again at some point. Chemotherapy can also have side effects that need to be taken into account.

Treatment with one of the newer immunotherapy drugs, such as avelumab (Bavencio) or pembrolizumab (Keytruda) might be another option. These types of drugs can shrink some MCC tumors and tend to have fewer side effects than standard chemo, although sometimes the side effects from these drugs can be serious.

Because these cancers can be very hard to treat with current therapies, patients may want to think about taking part in a [clinical trial](#)⁴. Studies are now looking at new drugs and combinations of different types of treatments. (See [What's New in Merkel Cell Carcinoma Research?](#)⁵)

MCC that comes back (recurs) after initial treatment

If MCC [comes back after treatment](#)⁶, further treatment depends on where it comes back and what types of treatment were used before.

If the cancer comes back on the skin where it first started, surgery (with wider margins) can often be done to try to remove it. This might be followed by radiation therapy to the area if it hasn't been given before. If the nearby lymph nodes haven't been treated, they might be removed and/or treated with radiation. Some doctors might consider giving chemotherapy as well, but it's not clear how helpful this might be.

If the cancer comes back in the nearby lymph nodes and they have not been treated before, they might be removed and/or treated with radiation. Some doctors might consider giving chemotherapy too, but, again, it's not clear how helpful this is.

Cancers that come back in distant parts of the body can be hard to treat. Surgery and/or radiation therapy might be used, but the goal is usually to ease symptoms rather than try to cure the cancer. Chemotherapy can often shrink or slow the growth of the cancer for a time and can help relieve symptoms. But chemotherapy can also cause side effects that need to be taken into account. Treatment with one of the newer immunotherapy drugs, such as avelumab (Bavencio) or pembrolizumab (Keytruda) might be another option. These drugs have been shown to be helpful against some advanced MCCs.

The benefits of each treatment need to be weighed against the side effects they might cause. Be sure you understand the goal of each treatment and its possible downsides before starting treatment.

Because these cancers can be hard to treat, patients might want to think about taking part in a [clinical trial](#)⁷. Studies are now looking at new drugs and combinations of different types of treatments (see [What's New in Merkel Cell Carcinoma Research?](#)⁸).

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Hyperlinks

1. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/staging.html
2. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/how-diagnosed.html
3. www.cancer.org/treatment/finding-and-paying-for-treatment/choosing-your-treatment-team/seeking-a-second-opinion.html
4. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
5. www.cancer.org/cancer/merkel-cell-skin-cancer/about/research.html
6. www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html
7. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
8. www.cancer.org/cancer/merkel-cell-skin-cancer/about/research.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Health Professional Version. February 1, 2018. Accessed at www.cancer.gov/types/skin/hp/merkel-cell-treatment-pdq on Sept. 19, 2018.

National Cancer Institute. Merkel Cell Carcinoma Treatment (PDQ®)—Patient Version.

May 2, 2018. Accessed at www.cancer.gov/types/skin/patient/merkel-cell-treatment-pdq on Sept. 19, 2018.

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Merkel Cell Carcinoma, Version 2.2018 -- June 15, 2018. Accessed at www.nccn.org/professionals/physician_gls/pdf/mcc.pdf on Sept. 19, 2018.

Tello TL, Coggshall K, Yom SS, Yu SS. Merkel cell carcinoma: An update and review: Current and future therapy. *J Am Acad Dermatol*. 2018;78(3):445-454.

Tetzlaff MT, Nagarajan P. Update on Merkel Cell Carcinoma. *Head Neck Pathol*. 2018;12(1):31-43.

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After Merkel Cell Skin Cancer Treatment

Living as a Cancer Survivor

For many people, cancer treatment often raises questions about next steps as a survivor.

- [Living as a Merkel Cell Carcinoma Survivor](#)

Living as a Merkel Cell Carcinoma Survivor

For many people with Merkel cell carcinoma (MCC), treatment can remove or destroy the cancer. The end of treatment can be both stressful and exciting. You may be relieved to finish treatment, but it's hard not to worry about cancer coming back. This is very common if you've had cancer.

For others, MCC may never go away completely. Some people may get regular treatment with [radiation therapy](#)¹, [chemotherapy](#)², [immunotherapy](#)³, or other treatments to try to help keep the cancer in check. Learning to live with [cancer that does not go away](#)⁴ can be difficult and very stressful.

Life after cancer means returning to some familiar things and also making some new choices.

Follow-up care

Even if you have completed treatment, your doctors will still want to watch you closely. It's very important to keep all follow-up appointments. During these visits, your doctors will ask if you are having any problems. They may also examine you and order [lab tests or imaging tests](#)⁵ to look for signs of cancer or treatment side effects.

Some [treatment side effects](#)⁶ might last a long time or might not even show up until years after you have finished treatment. Your doctor visits are a good time to ask questions and talk about any changes or problems you notice or concerns you have.

Exams and tests

A typical follow-up schedule for MCC might include physical exams, with complete skin and lymph node exams, every 3 to 6 months for the first 3 years, and then every 6 or 12 months after that. Some doctors might also recommend imaging tests such as PET/CT scans, especially for people who are at higher risk of the MCC returning (such as those who had a large tumor or more advanced disease).

It's also important for you to regularly examine your skin and lymph nodes. Most doctors recommend this at least monthly. You should see your doctor if you find any new lump or change in your skin. You should also report any new symptoms (for example, pain, cough, fatigue, or loss of appetite) that don't go away. If MCC comes back, it's usually within the first couple of years after treatment, but it can sometimes come back many years later.

Patients with MCC that doesn't go away completely with treatment will have a follow-up schedule based on their situation.

Ask your doctor for a survivorship care plan

Talk with your doctor about developing a [survivorship care plan](#)⁷ for you. This plan might include:

- A suggested schedule for follow-up [exams and tests](#)⁸
- A schedule for other tests you might need in the future, such as [early detection \(screening\) tests](#)⁹ for other types of cancer, or tests to look for long-term health effects from your cancer or its treatment
- A list of possible late- or long-term [side effects](#)¹⁰ from your treatment, including what to watch for and when you should contact your doctor

- [Diet and physical activity](#)¹¹ suggestions
- Reminders to keep your appointments with your primary care provider (PCP), who will monitor your general health care

Keeping health insurance and copies of your medical records

Even after treatment, it's very important to keep health insurance. Tests and doctor visits cost a lot, and even though no one wants to think of their cancer coming back, this could happen.

At some point after your cancer treatment, you might find yourself seeing a new doctor who doesn't know about your medical history. It's important to keep copies of your medical records to give your new doctor the details of your diagnosis and treatment. Learn more in [Keeping Copies of Important Medical Records](#)¹².

Can I lower my risk of MCC progressing or coming back?

If you have (or have had) MCC, you probably want to know if there are things you can do that might lower your risk of the cancer coming back, or of getting a new skin cancer.

At this time, not enough is known about MCC to say for sure if there are things you can do that will be helpful.

We do know that having a weakened immune system can raise the risk of dying from MCC, but this is often something people can't do much about. For example, some people need to take immune-suppressing medicines because they've had an organ transplant or because they have an autoimmune disease. But for others, there may be things you can do to help keep your immune system strong. For example, it's very important for people infected with HIV to take their medicines to help keep the infection under control.

We also know that people who have had MCC have a higher risk for other types of [skin cancer](#)¹³. Because of this, it's important to limit your [exposure to UV rays](#)¹⁴ (from the sun or tanning beds) and to [examine your skin](#)¹⁵ every month for signs of MCC coming back or possible new skin cancers. Skin cancers that are found early are often much easier to treat than those found at a later stage. (See [Skin Cancer Prevention and Early Detection](#)¹⁶ for information on how to protect your skin and do a skin self-exam.)

Adopting healthy behaviors such as [not smoking](#)¹⁷, [eating well](#)¹⁸, [being active](#)¹⁹, and

[staying at a healthy weight](#)²⁰ might help as well, but no one knows for sure. Still, we do know that these types of changes can have positive effects on your health that can extend beyond your risk of MCC or other cancers.

About dietary supplements

So far, no [dietary supplements](#)²¹ (including vitamins, minerals, and herbal products) have been shown to clearly help lower the risk of MCC progressing or coming back. This doesn't mean that no supplements will help, but it's important to know that none have been proven to do so.

Dietary supplements are not regulated like medicines in the United States – they don't have to be proven effective (or even safe) before being sold, although there are limits on what they're allowed to claim they can do. If you're thinking about taking any type of nutritional supplement, talk to your health care team. They can help you decide which ones you can use safely while avoiding those that might be harmful.

If the cancer comes back

If MCC does come back at some point, your treatment options will depend on where the cancer is, what treatments you've had before, and your overall health. For more information on how recurrent cancer is treated, see [Treating Merkel Cell Carcinoma Based on the Extent of the Disease](#)²². For more general information on dealing with a recurrence, see [Understanding Recurrence](#)²³.

Getting emotional support

Some amount of feeling [depressed, anxious, or worried](#)²⁴ is normal when cancer is a part of your life. Some people are affected more than others. But everyone can benefit from help and support from other people, whether friends and family, religious groups, support groups, professional counselors, or others. Learn more in [Life After Cancer](#)²⁵.

Hyperlinks

1. www.cancer.org/cancer/merkel-cell-skin-cancer/treating/radiation.html
2. www.cancer.org/cancer/merkel-cell-skin-cancer/treating/chemotherapy.html
3. www.cancer.org/cancer/merkel-cell-skin-cancer/treating/immunotherapy.html
4. www.cancer.org/treatment/survivorship-during-and-after-treatment/when-cancer-doesnt-go-away.html
5. www.cancer.org/cancer/merkel-cell-skin-cancer/detection-diagnosis-staging/how-

- [diagnosed.html](#)
6. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html
 7. www.cancer.org/treatment/survivorship-during-and-after-treatment/survivorship-care-plans.html
 8. www.cancer.org/treatment/understanding-your-diagnosis/tests.html
 9. www.cancer.org/healthy/find-cancer-early/cancer-screening-guidelines.html
 10. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html
 11. www.cancer.org/healthy/eat-healthy-get-active.html
 12. www.cancer.org/treatment/survivorship-during-and-after-treatment/be-healthy-after-treatment/keeping-copies-of-important-medical-records.html
 13. www.cancer.org/cancer/skin-cancer.html
 14. www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html
 15. www.cancer.org/cancer/skin-cancer/galleries/skin-self-exam-gallery.html
 16. www.cancer.org/cancer/skin-cancer/prevention-and-early-detection.html
 17. www.cancer.org/healthy/stay-away-from-tobacco.html
 18. www.cancer.org/healthy/eat-healthy-get-active/eat-healthy.html
 19. www.cancer.org/healthy/eat-healthy-get-active/get-active.html
 20. www.cancer.org/healthy/eat-healthy-get-active/take-control-your-weight.html
 21. www.cancer.org/treatment/treatments-and-side-effects/complementary-and-alternative-medicine/dietary-supplements.html
 22. www.cancer.org/cancer/merkel-cell-skin-cancer/treating/common-treatments-by-extent.html
 23. www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html
 24. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/changes-in-mood-or-thinking.html
 25. www.cancer.org/treatment/survivorship-during-and-after-treatment/be-healthy-after-treatment/life-after-cancer.html

References

See all references for Merkel Cell Skin Cancer (www.cancer.org/cancer/merkel-cell-skin-cancer/references.html)

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Merkel Cell Carcinoma, Version 2.2018 -- June 15, 2018. Accessed at www.nccn.org/professionals/physician_gls/pdf/mcc.pdf on Sept. 21, 2018.

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