About Kaposi Sarcoma

Overview and Types

If you have been diagnosed with Kaposi sarcoma or are worried about it, you likely have a lot of questions. Learning some basics is a good place to start.

- What Is Kaposi Sarcoma?

Research and Statistics

See the estimates for cases of Kaposi sarcoma in the US and what research is currently being done.

- Key Statistics About Kaposi Sarcoma
- What's New in Kaposi Sarcoma Research?

What Is Kaposi Sarcoma?

Cancer starts when cells in the body begin to grow out of control. Cells in nearly any part of the body can become cancer and can spread. To learn more about how cancers start and spread, see What Is Cancer?[1]

Kaposi sarcoma (KS) is a cancer that develops from the cells that line lymph or blood vessels. It usually appears as tumors on the skin or on mucosal surfaces such as inside the mouth, but these tumors can also develop in other parts of the body, such as in the

lymph nodes (bean-sized collections of immune cells throughout the body), the lungs, or digestive tract.

The abnormal cells of KS form purple, red, or brown blotches or tumors on the skin. These affected areas are called **lesions**. The skin lesions of KS most often show on the legs or face. They may look bad, but they usually cause no symptoms. Some lesions on the legs or in the groin area may cause the legs and feet to swell painfully.

KS can cause serious problems or even become life threatening when the lesions are in the lungs, liver, or digestive tract. KS in the digestive tract, for example, can cause bleeding, while tumors in the lungs may cause trouble breathing.

Types of Kaposi sarcoma

There are four different types of KS defined by the different populations it develops in, but the changes within the KS cells are very similar.

Epidemic (AIDS-associated) Kaposi sarcoma

The most common type of KS in the United States is epidemicor AIDS-associated KS. This type of KS develops in people who are infected with HIV, the virus that causes AIDS.

HIV stands for human immunodeficiency virus. A person infected with HIV (someone who is HIV-positive) does not necessarily have AIDS, but the virus can be present in the body for a long time, often many years, before causing major illness. The disease known as AIDS begins when the virus has seriously damaged a person's immune system, which means they can get certain types of infections (such as Kaposi sarcoma--associated herpesvirus, KSHV) or other medical complications, including KS.

KS is considered an **AIDS defining illness**. This means that when KS occurs in someone infected with HIV, that person officially has AIDS (and is not just HIV-positive).

In the United States, treating HIV infection with highly active antiretroviral therapy (HAART) has resulted in fewer cases of AIDS-associated KS. Still, some patients can develop KS in the first few months of HAART treatment.

For most patients with HIV, HAART can often keep advanced KS from developing. Still, KS can occur in people whose HIV is well controlled with HAART. Even if KS develops, it is still important to continue HAART.

In areas of the world where it is not easy to get HAART, KS in AIDS patients can advance quickly.

Classic (Mediterranean) Kaposi sarcoma

Classic KS occurs mainly in older people of Mediterranean, Eastern European, and Middle Eastern heritage. Classic KS is more common in men than in women. People typically have one or more lesions on the legs, ankles, or the soles of their feet. Compared to other types of KS, the lesions in this type do not grow as quickly, and new lesions do not develop as often. The immune system of people with classic KS is not as

Key Statistics About Kaposi Sarcoma

States each year. Most often, the types of KS that occurred were classic and transplant-related.

With the AIDS epidemic, the rate of KS in this country increased more than 20 times — peaking at about 47 cases per million people (per year) in the early 1990s.

With new treatments for HIV and AIDS, KS has become less common in the United States, and it now occurs at a rate of about 6 cases per million people each year. It is still seen most often in people infected with HIV. In the United States, KS is much more common in men than in women, and it is rarely seen in children. It is also more common in African Americans than in White individuals in the United States. Transplant recipients are another group that gets KS. About 1 in 200 transplant patients in the United States gets KS. Most of these people were already infected with Kaposi sarcoma associated herpesvirus (KSHV) before the transplant, but the virus didn't cause problems because their immune system kept it in check. The drugs the transplant patients take to suppress their immune system allow KS to develop.

In areas of the world (such as Africa) where KSHV and HIV infection rates are high, both endemic and epidemic (AIDS-associated) KS are seen, and can occur in men, women, and children.

Visit the American Cancer Society's Cancer Statistics Center[1] for more key statistics.

Hyperlinks

1. cancerstatisticscenter.cancer.org/

References

Howlader N, Noone AM, Krapcho M, Miller D, Bishop K, Kosary CL, Yu M, Ruhl J, Tatalovich Z, Mariotto A, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). SEER Cancer Statistics Review, 1975-2014, National Cancer Institute. Bethesda, MD, https://seer.cancer.gov/csr/1975_2014/, based on November 2016 SEER data submission, posted to the SEER web site, April 2017.

PDQ® Adult Treatment Editorial Board. PDQ Kaposi Sarcoma Treatment. Bethesda, MD: National Cancer Institute. Updated 01/30/2018. Available at: https://www.cancer.gov/types/soft-tissue-sarcoma/hp/kaposi-treatment-pdq. Accessed 03/01/2018. [PMID: 26389335].

Yarchoan R, Uldrick TS, Polizzotto MN, Little RF. Ch. 117 - HIV-associated malignancies. In: *DeVita, Hellman, and Rosenberg's Cancer: Principles & Practice of Oncology*. 10th ed. Philadelphia: Lippincott Williams & Wilkins; 2015.

What's New in Kaposi Sarcoma Research?

help treat these lesions. For example, the drug bevacizumab (Avastin®) has been shown to cause some KS lesions to shrink or stop growing in a small study. This drug and other angiogenesis inhibitors, such as sirolimus and everolimus, are being studied further.

Drugs called **immunomodulating agents** both boost the immune system and affect blood vessel growth, so these drugs may be helpful against KS. The oldest of these drugs, thalidomide (Thalomid®), has been shown to help shrink some KS lesions in early studies, but this drug can have side effects that make it hard to take. Related drugs, such as lenalidomide (Revlimid®) and pomalidomide (Pomalyst®), which tend to

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