KAPOSI’S SARCOMA (KS)

Summary

Kaposi’s sarcoma (KS) is an AIDS-defining illness. It is a cancerous condition that can develop on the skin or inside the body. KS on the skin is not a physically serious problem. KS in the internal organs can be life-threatening. There are several different kinds of treatment for KS.

What is Kaposi’s sarcoma?

Kaposi’s sarcoma (KS) is a form of cancer that most often affects the skin. KS appears as lesions or spots that may look like bruises. It can also develop in mucosal tissue like the lining of the mouth, in lymph nodes, or in internal organs like the bowel, lungs, or liver. The lesions may be the result of an overgrowth of blood vessels.

Although KS most often affects men, it can develop in women as well. An Italian study found that KS in women tends to be more aggressive and life-threatening than it is in men.

Recent studies have linked KS to a herpes virus called KSHV (Kaposi’s sarcoma herpesvirus) or HHV8 (human herpesvirus 8). It’s not clear just what role this virus may play in the development of KS.

Symptoms

KS skin lesions can appear in a wide range of colours, from pink to red to purple in light-skinned people and from dark purple to brown to black in dark-skinned people. Skin lesions may be raised or flat, they are often painless, and they don't feel itchy. They can look like a bruise but they don't fade and go away over time.

At first these lesions may be small and may cause no problems except for concern about their appearance. KS lesions may show little change from month to month or they can spread or become raised or lumpy.

KS inside the body occurs most commonly in the lungs and bowels. In the lungs, the growth of new blood vessels can block airways and lead to fluid buildup, causing coughing and difficulty breathing. KS in the stomach or gut may cause pain or bleeding.

Diagnosis

KS lesions can appear anywhere on the body and may look like bruises or other skin conditions. A biopsy of the skin is required to confirm the diagnosis. A biopsy involves the removal of a small piece of tissue for examination under a microscope.

A bronchoscopy or endoscopy can help diagnose KS of the internal organs. A thin, flexible tube with a viewing device that allows a doctor to see the organs may be inserted into the esophagus (gullet), stomach, and small intestine, into the rectum and colon (endoscopy), or into the windpipe and lungs (bronchoscopy). Biopsy samples of tissue can be removed through the scopes for analysis.
Treatment

There are a variety of treatments available for KS, including chemotherapy (drugs), radiation therapy, and surgery. Recently, there have been reports that the drugs used to control HIV may affect KS. Combinations of three or more anti-HIV drugs may not only control HIV but may also help to shrink, flatten, and fade KS lesions.

The type of treatment offered may depend on the location, size, and extent of the lesions. Small lesions, or those not visible when clothing is worn, may not be treated. Some people may choose to use concealing cosmetics for lesions on the face or hands.

A small number of lesions on the skin or the tissue lining the mouth may be treated locally by injection with anti-cancer drugs (intralional chemotherapy), by application of liquid nitrogen (cryotherapy), or by radiation (radiotherapy).

Panretin (9-cis-retinoic acid) is a gel form of retinoic acid, a derivative of vitamin A. It was recently approved in the United States for the treatment of KS on the skin. Panretin gel is applied directly to skin lesions.

Chemotherapy is used to treat widespread KS or KS of the internal organs. This often involves combinations of anti-cancer drugs like vinblastine, bleomycin, vincristine, etoposide, and doxorubicin.

Liposomal drugs are sometimes used to treat KS. These are standard chemotherapy drugs that are put inside microscopic bubbles of fat (liposomes). Liposomal drugs may have fewer side effects and they may be able to target cancer cells more efficiently than standard drugs. Liposomal doxorubicin (Caelyx) and liposomal daunorubicin (DaunoXome) are available in Canada; they are both, however, much more expensive than the standard forms.

The anti-cancer drug paclitaxel (Taxol) has been approved in the United States as a treatment for KS when other types of chemotherapy have failed.

The anti-CMV drug foscarnet has been used on a very small number of people to treat KS. Swedish researchers reported giving 180 milligrams per kilogram of body weight (mg/kg) of intravenous (IV) foscarnet daily for ten days to five patients with KS. Three patients went into long-term remission of KS: one patient for 12 months, the other two for at least 13 and 20 months respectively.

Side effects of treatments

Chemotherapy drugs can have many side effects, including damage to bone marrow. The bone marrow makes white blood cells that help fend off infections. Damage to the bone marrow weakens the immune system and may put some people at risk of developing opportunistic infections. Additional side effects, such as hair loss, nausea, vomiting, diarrhea and fever, can have an impact on quality of life during treatment.

Local therapy can cause pain, redness, and swelling at the site of treatment. Some local treatments may leave the area where the lesion was looking noticeably lighter or darker than the rest of the skin.

Credits

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References


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Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV-related illness and the treatments in question.

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