



Information Exchange

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KS (Kaposi's sarcoma)

Kaposi's sarcoma, or KS, is a type of cancer that men with advanced HIV infection may develop. It is rarely seen in women. Although KS mainly affects the skin, the mouth, and the lymph nodes, it can also involve the bowels and lungs. If it becomes severe, it may lead to swelling or breakdown of the skin.

Recent studies have shown that KS is caused by a sexually transmitted herpes virus, previously known as KSHV (Kaposi's sarcoma-associated herpes virus), it is now commonly called HHV-8 (human herpes virus 8).

Signs and Symptoms

KS growths, called lesions or tumours, may be seen in a wide range of colours, from pink to red-violet to brown to blue.

- **Skin lesions** - generally flat, painless and do not itch. They can look similar to a bruise. Do not blanch, or turn white, when pressure is applied. As the lesions progress, they may become elevated, can develop into nodules and can join together. Early on, these growths may be very small and innocent looking, causing no problems except for concern about their appearance. The pace of the disease varies from person to person. In some, growth is slow with little change from month to month. In others, growth is rapid with new spots occurring almost every week.
- **Lymph nodes** - swelling of the feet, lower legs or genitals can occur as a result of the blocked lymph system. Occasionally swelling can occur around the eyes and face.
- **Lungs** - recurrent chest infections, accumulation of fluid on the lungs and possibly blood in the spit, accompanied with coughing and breathlessness.
- **Gastrointestinal Tract** - Can be visible in the mouth (as a skin lesion) or cause bleeding from the gut.

Diagnosis

Skin Lesions - Because KS can appear anywhere on the body, and may look like other skin lesions, a biopsy of the skin is generally required to confirm a diagnosis, although this is not always necessary. A biopsy is when a small piece of tissue is removed for examination after local anaesthetic has been injected.

Lungs - When KS is suspected to involve the lungs, a test called a bronchoscopy is usually performed. X-rays and scans can also be used to detect lesions in the lungs.

Gastrointestinal tract - KS involving the gastrointestinal tract is best diagnosed with a test called an endoscopy (a flexible fibre optic tube is passed into the intestines through the mouth, to allow the doctors to see inside)

It's important to bring new spots to the attention of your clinic doctor.

KS and Highly Active Anti-Retroviral Therapy (HAART)

Since the advent of HAART there has been a reduction in the number of cases of KS, and a large number of people taking effective anti-HIV therapy have had significant improvements in their KS without any other treatment.

Treatment

Whether or not treatment is carried can be dependent on a number factors:

- The number of lesions present
- CD4 Count
- Presence of other symptoms (night sweats, weight loss)

KS on the skin is not in itself life threatening, and may resolve with HAART This is the first live treatment. You may decide to have an anti-cancer drug called vinblastine, injected directly into lesions that have not resolved. Larger lesions can also be treated with radiotherapy.

If the KS has spread more widely, HAART may be sufficient or chemotherapy may be necessary as well.

Liposome drugs can be used for the treatment of KS. Liposome drugs are standard chemotherapy drugs used to treat KS that are put inside microscopic bubbles of fat called liposomes. When the drugs are used this way, it is hoped they have fewer side effects and can be more effective. Two liposomal drugs used are called Doxil and DaunoXome. These drugs are the standard first-line chemotherapy for KS.

Chemotherapy is usually given by intravenous infusion as an outpatient every 2-3 weeks for 4 months. It may be necessary to give further courses of chemotherapy if the KS recurs.

Side Effects

Chemotherapy drugs can have many side effects. They can damage your heart, and also affect your bone marrow. Your bone marrow makes white blood cells. When you lose white blood cells, you are more likely to get bacterial infections. There are treatments to help make more white blood cells. If you are getting chemotherapy treatment your doctor will watch for any symptoms that may need treatment.

KS can be treated with radiation, chemotherapy and certain immunomodulators. These treatments often have severe toxic side effects such as suppression of bone marrow activity and white blood cell production. Additional side effects, such as hair loss and nausea, may affect quality of life during treatment. New liposomal therapies seem to have less of these side effects.

Additional treatments for KS may be necessary if it fails to respond to liposomal anthracyclines (drugs such as Doxil and DaunoXome) and in these circumstances, individually tailored therapy will be offered. Patients with KS may be offered enrolment into clinical trials of new agents.

This information was produced by The Information Exchange of the HIV/GU Medicine Directorate of the Chelsea and Westminster Hospital. For more information please call 020 8746 5929.

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