

# Rare Cancer Strain Found in Homosexual Men

The sudden occurrence of a rare form of cancer in homosexual men has brought together researchers studying the many variables in the development of cancer.

Known as Kaposi's sarcoma, an uncommon yet prototypic form of cancer, the disease was the focus of a recent workshop sponsored by the National Cancer Institute together with the Centers for Disease Control.

Originally described in 1872 by a Hungarian dermatologist, Kaposi's sarcoma is a type of skin cancer primarily seen in older men of Jewish or Italian descent. In 1979 it was diagnosed in 11 homosexual men quite by accident, when researchers were treating them for another disease.

Since then, 55 more cases have been found, and according to Dr. James Curran of the CDC, Kaposi's sarcoma "may be a new public health problem."

Investigators are puzzled by the prevalence of this disorder in homosexuals, leading them to question the role that life-style plays in cancer. Many of the Kaposi's patients have had multiple sex partners, and almost all at one time have used inhalants. Some also have a history of venereal disease.

Detailed clinical and personal profiles are assisting researchers in more closely identifying the relationship between these factors and the disease. The sudden onset and association with homosexuals suggest that prevention may be possible by eliminating the risk factors or variables connected with the cancer.

In the initial stages, small brownish-purplish patches appear on the skin, often resembling mosquito bites and moles. These are followed by tumors that develop internally, attacking the gastrointestinal tract, liver and lungs. Each tumor appears to arise individually rather than as a metastases or spread. In older patients, the disease may linger for 15 to 20 years, whereas the younger untreated victims survive only a few years at most.

Kaposi's sarcoma has also been observed in black women living in equatorial Africa. The progress of the disease in these women and in homosexual men appears to be similar, with an average age of onset around 35.

No other apparent connection between the two groups has been recognized. Researchers believe that studying the epidemiology of Kaposi's sarcoma will lead

them to more clues about the cause.

The pattern of the disease strongly suggests the involvement of an infectious agent, most probably a virus. Some scientists speculate that the suspected virus grows in the gastrointestinal tract and is spread by sexual contact.

In some studies, evidence of cytomegalovirus has been found in the blood of Kaposi patients, but conclusive proof is not available. No human cancer has ever been definitively proven to be virus caused.

Scientists don't know which came first when observing the marked immunosuppression almost universally evident in these patients. Multiple factors may be involved, such as drug abuse, poor nutrition and general physical neglect.

From animal studies, certain viral infections have been shown to depress the immune system and may well be the same mechanism at work in man. However, complicating this theory, is that the degree of immunosuppression in Kaposi's victims is extreme compared with that observed in "normal" CMV patients.

Kaposi's sarcoma appears to respond to certain types of chemotherapy, and in some cases, to radiation therapy. Still, the prognosis is not always hopeful for younger victims. More research, according to the workshop participants, is needed to improve present methods of treatment and to explore new ones such as immunotherapy, which may prove to be more promising.

In addition, a large-scale surveillance study is about to begin to determine the extent of the disease and identify differences between homosexual men who develop Kaposi's sarcoma from those who don't.

Researchers are also exploring the relationship between developing the disease and suppression of the immune system, in addition to efforts for identifying the causative agent. Much of this work involves collecting blood and biopsy samples that are analyzed and compared with control groups.

Dr. Bruce Chabner, acting director, Division of Cancer Treatment, NCI, said, "Kaposi's sarcoma is an accident of nature that has potential for greatly furthering our understanding of the cancerous process if studied by a variety of approaches."

—Mary Donovan □