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# CANCER FACTS

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National Cancer Institute • National Institutes of Health  
Department of Health and Human Services

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## Synovial Sarcoma

### Key Points

- Synovial sarcoma is a rare type of cancer that occurs most often around the joints in the legs and arms.
- Pain and tenderness are the most common symptoms, usually accompanied by a swelling or mass.
- Synovial sarcomas are found more often in adolescents and young adults than in older people, and slightly more often in men than in women.
- Children and adults are encouraged to enroll in clinical trials (research studies with people) exploring new and more effective treatments.

Synovial sarcoma is a rare cancer that begins in synovial tissue. Synovial tissue is found in tendons (tissues that connect muscle to bone), bursae (fluid-filled, cushioning sacs in the spaces between tendons, ligaments, and bones), and the hollow area that separates the bones of a joint, such as the knee or elbow.

Synovial sarcomas occur mainly in the legs and arms, where they tend to arise near large joints, especially around the knee. Less frequently, the disease develops in the head and neck and in the trunk. This cancer occurs mostly in older adolescents and young adults, and it affects slightly more men than women. Researchers do not know what causes synovial sarcoma.



The most common symptom of synovial sarcoma is a deep-seated swelling or a mass that may be tender or painful. In a few cases, a person may have tenderness or pain for several years, even though a mass cannot be felt. These cases can be easily mistaken for inflammation of the joints, the bursae, or synovial tissue (these noncancerous conditions are called arthritis, bursitis, and synovitis). Sometimes synovial sarcoma causes other symptoms related to the location of the tumor. The diagnosis of synovial sarcoma is made by biopsy (removal of tissue for examination under a microscope).

The type of treatment selected depends on the location of the tumor and the extent (stage) of the disease. The most common treatment for this type of cancer is surgery to remove the entire tumor, and nearby muscle and tissue. Some patients have radiation, chemotherapy, or a combination of treatment methods.

Synovial sarcoma tends to recur locally and to involve regional lymph nodes. Distant metastasis (spreading to other areas of the body) occurs in about one-half of the cases, sometimes many years after the initial diagnosis and treatment.

Because synovial sarcoma is such a rare type of cancer, both adults and children with this disease are encouraged to consider joining a clinical trial (research study with people). Biological therapy (treatment to stimulate or restore the ability of the immune system to fight the disease) is being studied in clinical trials. Researchers are also looking at new types of chemotherapy and combining high-dose chemotherapy with stem cell transplantation.

Information about ongoing clinical trials is available from the Cancer Information Service (see below), or on the clinical trials page of the National Cancer Institute's Cancer.gov Web site at <http://cancer.gov/clinicaltrials> via the Internet. At this Web site, trials for patients

with synovial sarcoma are included with “sarcoma, soft tissue, adult” and “sarcoma, soft tissue, childhood.”

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### **Sources of National Cancer Institute Information**

#### **Cancer Information Service**

Toll-free: 1-800-4-CANCER (1-800-422-6237)

TTY (for deaf and hard of hearing callers): 1-800-332-8615

#### **NCI Online**

##### ***Internet***

Use <http://cancer.gov> to reach the NCI’s Web site.

##### ***LiveHelp***

Cancer Information Specialists offer online assistance through the *LiveHelp* link on the NCI’s Web site.

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