

Testicular Cancer

Seminoma of the Testis

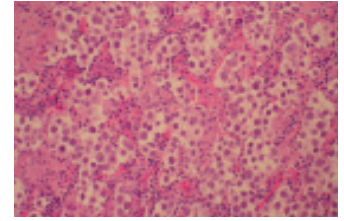
What is seminoma of the testis?

Seminoma of the testis is a form of germ cell testicular cancer. About 30 to 40 percent of the 8,500 testicular cancers diagnosed each year are one of two types of seminomas—seminoma, classic or seminoma, spermatocytic. The cancer can occur in one or both testicles. The cure rate is 70 to 95 percent, depending upon how extensively the cancer has spread. Nearly 140,000 men in the United States have survived testicular cancer, according to the American Cancer Society.

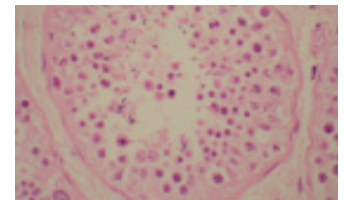
Who is likely to have seminoma of the testis?

Testicular cancer is the most common form of cancer among young men. It can occur in boys as well but rarely. White-American men have about five times the risk of testicular cancer as African-American men and about twice the risk of Asian-American men. The occurrence of this cancer among white men also has doubled over the past 40 years. The reasons for this increased occurrence are unknown.

Risk factors include a medical history of undescended testicles, abnormal testicular development, Klinefelter's syndrome (a sex chromosome disorder), or previous testicular cancer. Other possible risk factors include human immunodeficiency virus (HIV) infection and a family history of testicular cancer.



Seminoma of the testis.



Normal testicular cells.

Definitions

Germ cell:

Cells that produce sperm. Ninety percent of testicular cancers start here.

Testicle:

The male reproductive organ that produces sperm and the hormone testosterone.

Scrotum:

A sack of loose skin holding the testicles, located directly below the penis.

Malignant:

Cancerous and capable of spreading.

Pathologist:

A physician who examines tissues and fluids to diagnose disease in order to assist in making treatment decisions.

What characterizes seminoma of the testis?

These tumors are usually confined to the testicles. In some cases, the cancer spreads to the lymph nodes and beyond.

Symptoms include:

- A painless lump or swelling in either testicle
- A change in how the testicle feels
- An ache in the lower abdomen or groin
- A sudden build-up of fluid in the scrotum
- Pain, discomfort, or a feeling of heaviness in the scrotum

Sometimes, no symptoms occur.

How does the pathologist make the diagnosis?

You or your primary care doctor may discover an unusual, firm mass within the testicle. Your physician may hold a flashlight to the scrotum to see if light passes through the mass. If light does not pass through, your physician may order a **scrotal ultrasound** for the pathologist to examine to confirm a solid mass. Your physician also may order a **blood test**. The pathologist will search your blood sample for tumor markers associated with seminoma of the testis including human chorionic gonadotrophin (beta HCG) and lactic dehydrogenase (LDH). These blood marker tests also can monitor the response to treatment.

What else does the pathologist look for?

If the initial tests point toward cancer, a surgeon will remove the testicle containing the unusual mass to obtain a biopsy specimen for the pathologist to examine. The surgeon also may gather lymph nodes from the abdominal area for the pathologist to examine to determine if the cancer has spread. Your pathologist also may review a **chest x-ray** or **CT** scan results to see if the cancer has spread beyond the lymph nodes. With the results of the biopsy and all tests, the pathologist can determine the type and **stage** of the cancer. Stage 1 cancers are confined to the testicle, stage 2 to the lymph nodes in the abdomen, and stage 3 beyond the lymph nodes.

For more information, go to www.cancer.gov (National Cancer Institute) or www.nlm.nih.gov/medlineplus (US Library of Medicine). Type the keywords *testicular cancer* or *non-seminoma carcinoma of the testis* into the search box.



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