

## Testicular Carcinoma Assessment

Testicular carcinoma is the most common form of cancer in young males between 15-35 years old. The two main categories of testicular cancer are germ cell tumors (including seminomas and non-seminoma germ cell tumors) and sex cord-stromal tumors (including Leydig and Sertoli cell tumors). Germ cell tumors are most common. Cryptorchidism or undescended testes is a common risk factor of testicular cancer. Clinical manifestations include a painless scrotal mass, testicular swelling, and elevated serum tumor markers. Instruct the patient to perform a testicular self-examination once a month beginning at puberty. Treatment includes surgery, chemotherapy, and radiation. Since testicular carcinoma is one of the most curable types of cancers, early treatment yields good prognosis for long-term survival rates.



PLAY PICMONIC

### Cause/Mechanism

#### Seminoma Germ Cells

##### [Semi-gnome with German-cells](#)

There are two main categories of testicular cancer: germ cell tumors, and sex-cord stromal tumors. Germ cell tumors are most common. These include seminomas, as well as non-seminoma germ cell tumors, seminomas are the most common testicular tumor. Seminomas are generally less aggressive.

#### Non-Seminoma Germ Cells

##### [Nun-semi-gnome with German-cells](#)

Non-seminoma germ cell tumors include yolk sac tumor, choriocarcinoma, embryonal carcinoma and teratoma. These are generally more aggressive than seminomas. Beyond the germ cell tumors, another category of testicular tumors are the sex cord stromal tumors, which include Leydig cell and Sertoli cell tumors.

### Assessment

#### Painless Scrotal Mass

##### [No Pain-bolts sign at Scrotum with Mass](#)

In patients with testicular carcinoma, a painless scrotal mass may be felt upon palpation. The mass is usually firm and nontender. A cancerous mass does not transilluminate.

#### Testicular Swelling

##### [Testicles Swelling](#)

Persistent testicular swelling may create a feeling of heaviness. A dull ache or heavy sensation may be felt in the lower abdomen, perianal area, or scrotum.

#### Acute Pain Rare

##### [Acute-angle Pain-bolt Rare-steak](#)

Although rare, acute pain is the initial symptom in approximately 10% of patients with testicular cancer. Symptoms of advanced testicular cancer include pain in the lower back or chest, cough, and dyspnea.

## Elevated Serum Tumor Markers

[Up-arrow Tumor-guy with Markers](#)

In patients with suspected testicular cancer, blood is obtained to determine elevated serum tumor markers including alpha-fetoprotein (AFP), lactate dehydrogenase (LDH), and human chorionic gonadotropin (hCG).

### Considerations

#### Males Between 15-35 Years Old

[Men with F-15 and 35-mm camera](#)

Testicular cancer is the most common type of cancer diagnosed in young men. Males between 15-35 years old and patients with a family history of testicular tumors are at an increased risk of developing testicular carcinoma.

#### Cryptorchidism

[Crippled-orchid with cryptorchidism](#)

Cryptorchidism or undescended testes is a common risk factor for testicular cancer. Undescended testes cannot be felt while palpating the prostate for lumps or pain.

#### Testicular Self Exam

[Testicles doing Self Exam](#)

Instruct the patient to perform a testicular self-examination once a month beginning at puberty to detect tumors or scrotal abnormalities such as varicoceles. Advise the patient to roll the testis between the thumb and the first three fingers during a warm shower or bath. Warm temperatures help the testes hang lower in the scrotum. The patient should be checking for lumps, pain, and a dragging sensation in the scrotum. Teaching aids such as videotapes and step-by-step illustrations may help increase the patient's comfort in performing the procedure on a monthly basis.