



Testicular Cancer Fact Sheet

for Health Care Professionals



Testicular Cancer in the US^{1, 2}

Testicular cancer is not common, but its incidence has been increasing for several decades. Testicular cancer is most common in young and middle-aged men, but about 6% of cases occur in children and teens, and about 8% occur in men older than age 55. Because it can usually be treated successfully, a man's lifetime risk of dying from testicular cancer is low.

Types of Testicular Cancer²

More than 90% of cancers of the testicle are germ cell tumors (GCTs). The 2 main types of GCTs are seminomas and non-seminomas. They are treated differently because they grow and spread differently. The four main types of non-seminomas are embryonal carcinoma, yolk sac carcinoma, choriocarcinoma, and teratoma.

Many testicular cancers have both seminoma and non-seminoma cells. These mixed GCTs are treated like non-seminomas because they grow and spread like non-seminomas.

Risk Factors²

- Having cryptorchidism
- Having a personal or family history of testicular cancer
- Carcinoma in situ of the testicle
- Being a White male
- Being infected with the human immunodeficiency virus (HIV)

Screening and Detection²

Most testicular cancers can be found at an early stage. Most clinicians agree that testicular examination for men should be part of a physical exam during a routine visit. Patient education should include a discussion of possible risk factors.

The American Cancer Society does not have specific guidelines for regular testicular self-exams, but advises men to be aware of the risk of testicular cancer and to promptly report any testicular or scrotal changes, particularly a lump, to their doctor. Some clinicians advise all their male patients to perform monthly testicular self-exams after puberty.

Signs and Symptoms²

Some men with testicular cancer are asymptomatic. In men with symptomatic disease, the most common sign is a testicular swelling or lump. Some men may describe aching in the lower abdomen and groin, or scrotal heaviness. Non-cancerous conditions, such as testicle injury or inflammation (orchitis and epididymitis), can cause similar symptoms.

Hormone production from certain types of testicular cancer can cause breast development or soreness, or early puberty in boys.

Advanced testicular cancer can present with lower back or abdominal pain due to lymph node or liver metastasis; cough, chest pain, or shortness of breath from lung metastasis; or headaches or confusion from brain metastasis.

Prevention²

Many men with testicular cancer have no known risk factors. And most known risk factors are not modifiable. For these reasons, it's not possible to prevent most cases of testicular cancer.

Treatment^{2, 3, 5}

Surgery is the first treatment for nearly all testicular cancers. Prior to surgery or other treatment, patient education should include discussion about fertility concerns, including sperm banking options and infertility counseling as appropriate.

A transcrotal biopsy of the testes is contraindicated for diagnosis because it increases the risk of local recurrence and cancer spread. Testicular ultrasound should be done first, and, if a concerning mass is found, it should be followed by a radical inguinal orchiectomy for diagnosis and treatment. Other treatment may be needed depending on the type and stage of cancer, tumor characteristics, tumor markers, and the person's overall health.

Quality of Life ^{4, 5}

Some people with testicular cancer have concerns about maintaining sexual function and body image after orchiectomy. Insertion of a testicular prosthesis might be an option. It is important to emphasize to them that orchiectomy should not affect the ability to get an erection, but that a retroperitoneal lymph node dissection (RPLND) might cause problems with ejaculation. Other concerns that men with testicular cancer and survivors most often have include possible long-lasting side effects like fertility problems, pain, fatigue, depression, sleep difficulties, and the burden their cancer may have on finances and loved ones.

Testicular Cancer in the US:

2023 estimates ^{1, 2}

New cases:

- New cases: 9,190
- Deaths: 470
- 5-year relative survival rate for localized stages: 99%
- 5-year relative survival rate for all stages combined: 95%

A cancer diagnosis can profoundly impact quality of life. **Clinicians should assess for any physical, social, psychological, spiritual, and financial issues.** Integrating palliative care can help manage symptoms, address issues, and improve quality of life. It can be offered at any time, from diagnosis until the end of life. Throughout a person's cancer journey, it's very important for clinicians to share information and coordinate care to ensure ongoing surveillance.

References

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