

Overview

The urethra is the structure that carries urine, and in men, semen from the body. It is located within the penis (organ for reproduction and urination) in men and in front of the vagina (passageway to the uterus, birth canal) in women. Urethral cancer is rare and is often associated with invasive bladder cancer. It tends to spread (metastasize) to adjacent soft tissue and is often locally advanced when diagnosed.

Types

Different types of urethral cancer develop within different types of cells and in different portions of the urethra. In women, the urethra is lined with transitional cells near the urethral opening and squamous cells near the bladder. In men, transitional cells line the upper portion and squamous cells line the urethra at the base of and within the penis.

Squamous cell carcinoma develops in flat, scaly surface cells and is the most common type of urethral cancer.

Other types include the following:

Transitional cell carcinoma (develops in surface cells of the urethra)

Adenocarcinoma (develops in glands located near the urethra)

Melanoma (extremely rare; develops in pigment-producing skin cells)

Sarcoma (extremely rare; develops in blood vessels, smooth muscle, and connective tissue)

Urethral cancer that is superficial and located in the anterior portion of the structure (i.e., toward the urethral opening) often can be treated successfully. Cancer that develops in the posterior portion of the urethra (i.e., near the bladder) is usually invasive and rarely curable.

In women, urethral cancer often spreads to the labia, vagina, and bladder neck. In men, the condition may spread to the tissues of the penis and perineum, the prostate gland, the ligament that surrounds the urethra (urogenital diaphragm), the regional lymph nodes, and the penile and scrotal skin.

Incidence and Prevalence

Urethral cancer is more common in women. It can occur at any age, but the incidence is highest in patients in their 60s.

In men, 80% of cases are squamous cell carcinomas, most of which occur in the urethra at the base of the penis. In women, 60% of cases are squamous cell carcinomas.