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Squamous Cell Carcinoma of the Bladder Diagnosis and Management

Squamous cell carcinoma of the bladder is a rare type of bladder cancer. At the time of discovery, most bladder tumors are deeply invasive. Diagnostic workup includes urinalysis, CT urography, and cystoscopy with biopsy. Other imaging modalities like ultrasound and MRI may also be considered. The treatment for bladder cancer is usually surgical. Radiation along with chemotherapy may also be administered.



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Diagnosis

Urinalysis

Urinal with Urinalysis-cup

One way to test for bladder cancer is to check for blood in the urine. This can be done by a urinalysis. Blood in the urine is usually caused by benign problems like cystitis, but bladder cancer should be on the differential. Newer tests are looking for certain tumor markers in the urine to detect bladder cancer.

CT Urography

Cat-scan of Bladder-guy

A CT urogram explores the cause of blood in the urine by examining the upper urinary tract. This test is good at finding tumors of the kidney, renal pelvis, and ureter. It is useful in identifying the spread of cancer to lymph nodes or other abdominal organs.

Cystoscopy with Biopsy

Bladder with Scope and Biopsy-needle

A cystoscopy is used to look inside the bladder and urethra. A small tube with a camera lens is inserted through the urethra. Sterile salt water is injected through the cystoscope to fill the bladder which makes the inner lining easier to view. Biopsy samples are commonly taken at the time of a cystoscopy.

Management

Surgery

Surgeon

There are several surgical options for bladder cancer. For non-invasive cancer (low- or high-grade), a transurethral resection of bladder tumor (TURBT) procedure can be considered. This is usually performed as an outpatient procedure and has an excellent prognosis-to-risk ratio. TURBT may be combined with intravesical instillation of chemotherapy or BCG to prevent recurrence. For invasive tumors, a radical cystectomy may be considered with urinary diversion, which means that a neobladder is constructed from intestinal tissue, and the ureters direct urine into this neobladder. "Radical" means several tissues are removed including bladder, prostate, seminal vesicles, uterus, ovaries, cervix, and lymph nodes.

Radiation

Radiation-radio

For metastatic disease or if the patient is unable to undergo surgery, radiation therapy along with chemotherapy is often performed.

Chemotherapy

Chemo-head-wrap

Chemotherapy may be used alone or in conjunction with radiation. The most common drugs used to treat bladder cancer are cisplatin, 5-FU, methotrexate, mitomycin, vinblastine, gemcitabine, and paclitaxel.