

BLADDER CANCER IN JAMAICA

The recent passing of a well-known Jamaican brought some attention to bladder cancer in Jamaica. Bladder cancer is not very common in Jamaica, as confirmed by the National Cancer Registry. They reported in 2002 the incidence of bladder cancer to be 1.8/100,000 among women and 3.4/100,000 in men. This places bladder cancer below the ten most common cancers in Jamaica. This is unlike the United States where it is the fourth most common cancer among men and the tenth among women. The reported incidence in the United States is increasing and anecdotally the incidence may be increasing locally as well. Bladder cancer is more common in men than women and in whites than blacks and Asians. The incidence also increases with age.

Bladder cancer is not a single entity. Tumours mainly arise from the innermost lining of the bladder but there are several variants, the most common of which is termed transitional cell cancer. This cancer while most often occurring in the bladder can also arise from the lining in the kidneys and the ureters, the tubes that connect the kidneys to the bladder.

Transitional cell cancers are mainly associated with smoking. They are also associated with industrial exposure to chemicals in dyes, paints, solvents, leather dust, inks, combustion products, rubber, and textiles. These cancers are divided into two grades, low grade tumours and high grade tumours. Low grade tumours are less aggressive and often do not invade into the deeper layers of the bladder wall. They commonly are diagnosed as superficial lesions. High grade tumours progress more quickly and are often already invading the deeper layers at the time of diagnosis. The very early stage of high grade transitional cell cancer is called "carcinoma in situ".

Superficial and invasive tumours vary in their treatment and prognosis. The majority of persons present with superficial lesions but 20 to 40% will present with or progress to invasive disease. If untreated, 85% of persons with invasive disease demise within two years. The other significant tumour types are squamous cell tumours and adenocarcinomas. Squamous cell tumours are associated with chronic inflammation of the bladder and a parasite found in the Middle East which infests the bladder.

Blood in the urine is often the only symptom of a bladder lesion. This may be obvious on routine inspection of the urine or it may be microscopic. Unfortunately many persons who note blood in their urine do not have it checked immediately or get treated initially as an infection. This delay can be detrimental in the eventual outcome of the disease. Any occurrence of blood in the urine should be investigated appropriately to avoid missing a bladder lesion. The bleeding may be associated with frequent urination and discomfort with voiding. With more advanced disease, patients may experience pelvic pain, weight loss, loss of appetite and weakness. Obstruction of the kidneys can lead to renal failure and spread to bone can cause pain and fractures.

An ultrasound is often the first investigation to suggest the presence of a bladder lesion. It can also be detected by the finding of abnormal cells in the urine. Cystoscopy, inspection of the bladder with a telescope passed via the urethra (water passage), is used to confirm the lesion. If it is superficial, it can be removed piecemeal at the same time. Medications can be instilled into the bladder to decrease the likelihood of recurrence or progression of superficial disease to invasive disease. Many persons have recurrent superficial disease over many years requiring repeated removal by cystoscopy but never progressing to invasive disease.

If the lesion is invading the deeper layers of the bladder wall but has not yet spread to other areas, removal of the bladder or radiation treatment becomes necessary. A CT scan or MRI is often used to determine the extent of the disease. Surgical resection of the bladder with organ confined disease has a greater chance of success. If bladder preservation is desired however, radiation often combined with chemotherapy can be administered. Chemotherapy can also be given before surgery to increase the likelihood of complete removal of the tumour or after to decrease the chance of recurrence. Chemotherapy is also used to treat recurrent disease or disease which has already spread at the time of diagnosis.

In summary, bladder cancer, depending on the particular situation, can be a nuisance requiring many minor procedures over years or it can be a lethal illness. As with all cancers however successful treatment is much more likely with early diagnosis. Prompt investigation of any occurrence of blood in the urine can prevent delayed diagnosis. Avoidance of risk factors such as tobacco also plays an important role in preventing this disease.

Contributed by

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