

## PROSTATE CANCER

***This information sheet is for your general information and is not a substitute for medical advice. The specifics of your condition and treatment should be discussed with your oncologist to establish the optimal treatment plan for you as an individual.***

Besides lung cancer, prostate cancer is the second most common cancer in males. It occurs mostly in those aged 60 and older. Continuous exposure of the prostate to the male hormone testosterone probably plays a role in the development of malignancy (cancerous cells). Genetic as well as dietary factors have also been identified as playing a role.

Screening (testing) for prostate cancer has an important role to play in the early diagnosis of the condition. It can be done by digital rectal examination, a transrectal ultrasound or a prostate specific antigen (PSA) blood test. A PSA test is, however, not the appropriate screening test since it is not specific for prostate cancer – a rectal examination is the screening test of choice. Monitoring should start at the age of 50. With a strong family history, the recommended starting age for screening is 40.

Being a relatively slow-growing cancer, long-term survival is seen even in cases where the condition has become widespread.

To find out if a patient has the condition and how far it has spread, the following tests are done:

- tissue is taken from the prostate (called a biopsy) to confirm the presence of cancer and to find out what kind of cancer it is
- isotope scans, if indicated; these tests are a way of imaging bones, organs and other parts of the body by using a small dose of a radioactive chemical
- chest x-ray
- cystoscopy, which is performed with a lighted optical instrument called an endoscope to get a deep look inside the bladder
- blood and urine analysis.

Your doctor may require further investigation depending on your symptoms at the time of the tests.

### **Treatment options**

Treatment will depend on the nature and extent of the condition, as well as on your general state of health.

Watchful waiting, radical surgery (which removes all diseased tissue), various forms of radiation therapy and hormonal therapy are all used in the treatment of this condition.

If cancer is diagnosed early on, watchful waiting is still sometimes recommended. However, radiation and radical surgery are most commonly used. The following radiation treatment options exist:

- Permanent prostate implants are a type of radiation therapy in which a high dose of radiation is delivered to cancerous tissue by many small radioactive 'seeds'. There are very strict criteria that must be met before this treatment may be performed.
- Intensity-modulated radiation therapy (IMRT) is a form of external beam radiotherapy that uses computer-controlled x-rays to deliver precise radiation doses to tumours or specific areas in the tumour. IMRT allows the radiation dose to conform more precisely to the three-dimensional shape of the tumour by controlling the intensity of the radiation beam.

The results of these forms of treatment are similar.

In more advanced cases and without proof that the condition has spread to the rest of the body, radical external beam radiation is the treatment of choice, with or without temporary or long-term hormonal treatment.

For metastatic disease, i.e. spread of a condition from one organ or another, hormonal treatment remains the primary treatment. It can mean surgical removal of the testes or, alternatively, the blockage of testosterone production using injections or pills. Radiation to painful areas where the condition has spread to bones can be added when and as needed to improve quality of life.

Chemotherapy is largely unproven in this condition and is only used when all other forms of treatment have failed.

### **References**

GVI Oncology (South Africa)