

7.10 UROLOGICAL CANCER

Introduction

There are three main types of urological cancer, kidney, bladder and prostate.

Kidney

In Northern Ireland in 2005 there were 103 cases in men and 74 cases in women. Levels of kidney cancer in Northern Ireland have remained the same since 1993. Around one in every two people diagnosed with kidney cancer are alive five years after diagnosis. This is similar to the rest of the UK but worse than some European countries and North America. There has been no detectable improvement in survival from kidney cancer over the last ten years.

The risk of developing cancer of the kidney is around 1 in 90 for males and 1 in 170 for females. People at increased risk include:

- Smokers – people who smoke are twice as likely to develop the disease.
- People who are obese
- People who have high blood pressure and regular dialysis as a result of kidney failure.
- People with inherited diseases or conditions such as Von Hippel-Lindau (VHL) syndrome, tuberous sclerosis, Birt-Hogg-Dube syndrome.
- Some kidney cancers (familial kidney cancer) can be caused by inheriting faulty genes.
- Some chemicals can increase the risk of developing kidney cancer and (e.g. cadmium, trichloroethylene and dry cleaning solutions). As a result, higher levels of kidney cancer are linked with workers in the petrochemical, iron and steel industries.

Eating a well balanced diet lowers the risk of developing this cancer type.

Bladder

In 2005, 132 men and 58 women were diagnosed with bladder cancer. Survival from bladder cancer is generally poorer for females than males and those aged 64-99 compared to those aged 15-64.

Risk factors for bladder cancer include:

- Tobacco use - The risk is four times higher in smokers versus non-smokers. The level of risk being linked to the length of time a person has smoked.
- Exposure to polyaromatic hydrocarbons (chemicals formed during the burning of coal, oil, gas, wood, tobacco, and rubbish) in the environment may also increase incidence of bladder cancer.
- A diet high in fruit and vegetables has been linked to reduced risk.

Prostate

In recent years, the number of new cases of prostate cancer has been increasing. This is due to improved detection of the disease within *primary care* with increased use of *PSA testing*¹⁴. The number of patients diagnosed in 1993 was 473; this increased to 747 in 2005.

Death rates have remained the same during the last twelve years. Just under two in three people (64.5%) are alive five years after a diagnosis of prostate cancer.

Risk factors

- Family history is a risk factor in the development of prostate cancer, with a doubling of risk for males with a relative who has been diagnosed with the disease. The risk increases to three times if the relative is a brother and increases to four times if a father, brother or son is diagnosed before the age of 60.
- A strong family history of breast cancer is also an indication of an increased risk as it may indicate the presence of the faulty BRCA1 gene which can also lead to prostate cancer in men.

Other relevant standards: Radiotherapy

¹⁴ PSA testing is not recommended as a screening test as it can detect disease which might not present clinically (i.e. disease that would not cause the patient any ill health or impact on their life expectancy).

Overarching standard 45:

Radical surgery for prostate and bladder cancer should be provided by teams carrying out a total of at least 50 such operations per annum and should take place on a single site, which offers appropriate post-operative care.

Rationale:

Hospitals that manage larger numbers of these patients report better outcomes for patients and lower resource use.

Evidence:

National Institute for Health and Clinical Excellence (NICE) (2002) Improving Outcomes in Urological Cancer <http://guidance.nice.org.uk/CSGUC>

National Institute for Health and Clinical Excellence (NICE) (2008) Prostate Cancer: Diagnosis and Treatment <http://guidance.nice.org.uk/CG58>

Responsibility for delivery / implementation

HSC Board
Public Health Agency
HSC Trusts
Multidisciplinary teams

Quality Dimension**Safe, Effective & Efficient**

Hospitals which manage larger numbers of patients with prostate and bladder cancer report lower *complication* and *mortality rates* and lower resource use.

Performance Indicator	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of radical <i>prostatectomies</i> and <i>cystectomies</i> carried out for cancer by surgical teams performing at least 50 of these procedures each year	MDM database	100%	March 2011

NOTE: Performance indicators and targets will be reviewed and adjusted as necessary, in the light of the current Budget settlement for 2011/12 to 2013/14.