Blood in Urine

Why focus on blood in urine?
- Visible blood in urine is the most common symptom of both bladder and kidney cancers, occurring in over 80% of bladder cancers and more than half of kidney cancers.
- Bladder cancer is the 7th most common cancer in England. Each year more than 8500 people are diagnosed with the disease and more than 4000 die from it.
- Kidney cancer is the 8th most common cancer in the UK. Each year more than 7000 people are diagnosed and more than 3000 die from the disease.

Who's at greatest risk of bladder cancer?
- Bladder cancer is more common in people over 50 years.
- Bladder cancer is more common in men than women but both are affected.
- Current smokers have between 2 and 6 times the risk of bladder cancer compared with never-smokers. Risk increases with duration of smoking and number of cigarettes smoked each day.
- Around 5 to 10% of bladder cancers in Europe are linked to occupational exposures. Exposure to aromatic amines found in paint, plastic, rubber and paper manufacture and hair dyes and polyaromatic hydrocarbons used in many industries can increase the risk of bladder cancer.
- Rates of bladder cancer do not vary much by socio-economic background but rates are generally higher in the north of England than the south.
- The white population has a higher risk of bladder cancer than Asian or black populations.

Who's at greatest risk of kidney cancer?
- Kidney cancer is most common in older people with three-quarters of cases in over 60’s.
- Kidney cancer is more common in men than women but both are affected.
- Current and former smokers have around a 50% and 25% higher risk respectively of kidney cancer.
- Being overweight increases the risk of kidney cancer by 35% and obesity increases the risk by 70%.
- Patients on kidney dialysis have three to four times increased risk of kidney cancer.
- There are slightly higher rates of kidney cancer in deprived groups than affluent groups and rates are generally higher in the north of England than the south.
- The white population has a higher risk of kidney cancer than the Asian or black populations.

Most important symptoms of kidney and bladder cancers
- Visible blood in urine (present in more than 80% bladder cancers and over 50% kidney cancers)
  - Blood in urine is a potentially serious symptom which should always be checked out by a doctor.
Around 1 in 10 people with blood in urine will have bladder cancer. 

Recurrent urinary tract infections, pelvic or loin pain

The importance of diagnosing kidney and bladder cancers early

One year survival for men with bladder cancer is 78% and in females 68%. Five year survival for men with bladder cancer is 57% and in females 49%.

One year survival for kidney cancer is 70%. Five year survival for kidney cancer is around 50%.

When diagnosed at the earliest stage one year survival for kidney and bladder cancers is around 94%. When found at a late stage survival is around 20 to 35%.

Estimates suggest that around 1000 deaths from bladder and kidney cancer could be avoided if survival rates matched the best in Europe. This could be improved by ensuring that patients are diagnosed at an earlier stage of disease.

18% of bladder and 24% of kidney cancers are diagnosed through emergency presentation such as via Accident and Emergency departments.

There is a complex relationship between delay and bladder cancer survival. For bladder cancer some studies suggest that pre-treatment delay leads to poorer survival, whereas others have found no link. There is little data on the relationship between delay and kidney cancer survival. Most of the studies that have been conducted have found no link.

Awareness of bladder and kidney cancer

Only 29% of people recall unexplained bleeding (including blood in urine) as a possible sign of cancer.

More information?

For more information about the National Awareness and Early Diagnosis Initiative sign up to the NAEDI newsletter by emailing naedi@cancer.org.uk

For more background on the evidence and rationale for early diagnosis, take a look at the NAEDI BJC supplement

Find out more about diagnostic testing for bladder and kidney cancer on Cancer Research UK’s patient information section of the website.

Read the NICE referral guidelines for suspected cancer.

References

16. Abdel-Rahmen, M et al., What if cancer survival in Britain were the same as in Europe: How many cancers are avoidable? British Journal of Cancer; 2009. 101 Suppl: S115-24.

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