BLADDER CANCER

Microscopic haematuria associated with increased risk

Despite the high prevalence of the disease, patients with bladder cancer often have a poor prognosis because diagnosis relies on a symptomatic patient presenting to their primary-care provider. Symptoms associated with bladder cancer include dysuria, abdominal pain and weight loss, with frank haematuria well established as the highest-risk symptom.

Asymptomatic microscopic haematuria, or nonvisible haematuria, is often detected on routine urine dipstick tests, at a rate of 22% in men aged >60 years. Nonmalignant causes include glomerular disease and UTI, which are more common than a malignant origin. If nonvisible haematuria is detected, the current UK National Institute for Health and Care Excellence (NICE) recommendation for patients aged <50 years is nonurgent referral after treatment of potential UTI, or urgent referral in those >50 years of age, reflecting the higher prevalence of bladder cancer in this group.

A study recently published in the *British Journal of General Practice* has shown that

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the presence of nonvisible haematuria is indeed a risk marker for bladder cancer, suggesting that further investigation might be more urgently required in older patients. The researchers used an electronic database to match patients with bladder cancer ($n=4,915$) to controls ($n=21,718$) by gender, age and general practice; coded and uncoded data were then used

to determine the presence of visible or nonvisible haematuria up to 1 year before a cancer diagnosis.

The calculated positive predictive value (PPV) of visible haematuria in this study was 2.8% in patients aged >60 years, and 1.2% for those 50–59 years. Nonvisible haematuria was also associated with bladder cancer diagnosis, but with PPVs of around half that of visible haematuria—1.6% and 0.8% in those aged >60 years and 40–59 years, respectively.

This work represents the first study to report an increased risk of bladder cancer in patients in whom nonvisible haematuria is detected; the authors suggest that the NICE guidelines could be amended to include urgent referral of patients aged >40 years, as opposed to the current cut-off of 50 years.

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Original article Price, S. J. *et al.* Non-visible and visible haematuria and bladder cancer risk: a study of electronic records in primary care. *Br. J. Gen. Pract.* 64, e584–e589 (2014)