UK NATIONAL SCREENING COMMITTEE

Policy Review

Screening for Bladder Cancer

10 November 2010

Aim

1. To agree the UK National Screening Committee's (UK NSC) formal policy position on screening for bladder cancer.

Background

2. A review of screening for bladder cancer was carried out in February 2010 by Dr Martin Allaby from Solutions for Public Health. The review is a partial update of a previous UK NSC evaluation of screening for bladder cancer (Laitner 2002) and is best read in conjunction with that report. The evaluation had concluded that urine dipstick testing for small quantities of blood in asymptomatic individuals, microscopic haematuria did not satisfy the UK NSC criterion that there should be a simple, safe, precise and validated screening test for any proposed screening programme, "the positive predictive value of microscopic haematuria is low and may not confer a significantly higher risk for bladder cancer than a negative result for microscopic haematuria. For this reason microscopic haematuria is not considered a valid test for bladder cancer in the context of population screening" (Laitner 2002).

3. In recent years a number of novel urine-based bladder tumour markers (UBBTMs) have been developed (Shirodkar & Lokeshwar 2008). Dr Allaby's review assesses the extent to which urine dipstick testing or any of the newer UBBTMs have been shown to offer a simple, safe, precise and validated screening test for bladder cancer in apparently healthy people (UK NSC criterion number 5). It does not address the question of whether early treatment, for patients identified through screening, leads to better outcomes than late treatment (UK NSC criterion number 10), because it would be premature to re-appraise a potential bladder cancer screening programme against the other UK NSC criteria until a suitable screening test has been validated.

4. A copy of the review was circulated to members in March 2010 before being open to public consultation for three months. A copy of the consultation replies are attached at Annex A.

5. The review recommended that the UK NSC should not recommend screening for bladder cancer at this time, but should update Dr Allaby's review when the results of the bladder cancer screening studies described by Svatek and Lotan (2008) and Roobol et al (2009) become available.

Recommendation

6. The UK NSC is asked to agree the policy position on screening for bladder cancer as follows:-

A national screening programme for bladder cancer is not recommended.

8. The UK NSC is asked to agree that the policy should be reviewed in three years time unless there is significant new peer reviewed evidence.

Annex A

Consultation Replies

The Royal College of Physicians and the Association of Cancer Physicians

The Royal College of Physicians (RCP) and the Association of Cancer Physicians (ACP) are grateful for the opportunity to comment on the above draft. We would like to make the following joint response.

We believe that the conclusion of the document, that none of the currently available urine tests has sufficient sensitivity and specificity to be regarded as a validated test for use in a national screening programme, appears sound. Likewise, the recommendation that an update should be undertaken when data from on-going studies becomes available is sensible. However, there is little information on how the relevant studies were identified and therefore no certainty whether this represents an exhaustive analysis.

We believe it is appropriate to focus most attention on early identification of higher grade tumours. These are the tumours most likely to recur and/or progress to life-threatening disease. However, we would question whether an appropriate screening test need necessarily discriminate between higher and lower grade tumours. This is an extremely optimistic objective, which has not been achieved in other screening settings, as far as we are aware. Although the major impact on mortality will be from early detection of muscle-invasive tumours, superficial bladder tumours are still a major cause of morbidity and a significant health economic burden. Therefore, pre-symptomatic detection of early-stage transitional cell cancer (TCCs) is also a desirable goal.

There appears to be a typographical error in the final paragraph on page 2. Does "The 'maximum sensitivity' estimates shown in Table 1…" actually refer to Table 2?

There is a clear, on-going, unmet need for informative diagnostic bladder cancer biomarkers. It would be valuable to include a statement supporting the association of parallel translational studies investigating diagnostic urinary biomarkers with current and future clinical trials, as a means of obtaining urine samples for molecular analysis. Ideally, this should be done in a co-ordinated, centralised fashion (possibly via the NCRI bladder cancer Clinical Studies Group), to maximise the statistical value of specimens donated by patients.

British Association of Urological Surgeons

We are in agreement that currently available tests are not sufficiently accurate to support a screening programme. We agree that testing urine for blood in asymptomatic patients should be discouraged. We are not able to comment on the statement that dipstick testing for protein in asymptomatic patients should not be done.