



ELSEVIER

ORIGINAL ARTICLE

PSA testing of men in the haematuria clinic, a useful additional test or unnecessary investigation

Shankar Chandrasekharan*, Adel A. Shafik, Jonathan D. Eaton

Department of Urology, Alexandra Hospital, Woodrow Drive, Redditch B98 7UB, United Kingdom

Received 17 August 2009; accepted 25 September 2009

KEYWORDS

Haematuria;
Prostate cancer;
PSA

Summary

Objective: To determine prostate cancer detection rates in a haematuria clinic and provide an insight into the usefulness of PSA testing in the haematuria clinic.

Patients and methods: The records of all male patients ($n = 749$) seen in the haematuria clinic over a 2-year period were analysed.

Results: Of the 749 men, 511 (68%) had a PSA measured. In total, 28 cases of prostate cancer were diagnosed (3.7% of total). In the 50–69 age group, 263 out of 350 men (75%) had a PSA test. 11 cancers were diagnosed in this group (which was 3.1% of all patients or 4.2% of those screened in this age group).

Conclusion: Our screening rates were slightly lower than those in the ProtecT, ERSPC and PLCO studies. Our overall cancer detection rate of 3.1% (for the 50–69 year olds) is comparable to those from ERSPC (8.2%), ProtecT (2.2%) and PLCO (1.4%). The data would suggest that there is not an excess of prostate cancer in patients with haematuria. PSA testing should be accompanied by a full and frank discussion about the benefits and risks of PSA screening which is not always practical in the haematuria clinic.

© 2009 British Association of Urological Surgeons. Published by Elsevier Ltd. All rights reserved.

Introduction

Prostate cancer is an increasing public health problem. There is great controversy and debate about

screening for prostate cancer. Recently, there were two large trials of prostate cancer screening published, the American PLCO study of 76,693 men [1] and the European ERSPC study of 162,243 men [2]. From the European study, the authors discuss that 1410 men need to be screened and 48 cases of prostate cancer need to be treated to prevent one death from prostate cancer. Both the EAU and AUA state that men who wish to undergo PSA screening should receive information on the risks and benefits of screening and individual risk assessment.

* Corresponding author at: Department of Urology, Alexandra Hospital, Woodrow Drive, Redditch B98 7AU, United Kingdom. Tel.: +44 1527 503030x42157; fax: +44 1527 523455.

E-mail addresses: Shankar.chandra@doctors.net.uk (S. Chandrasekharan), minando2@yahoo.co.uk (A.A. Shafik), jonathan.eaton@worsacacute.nhs.uk (J.D. Eaton).

Haematuria is another common problem that presents to the Urologist, especially with the ease of use of urine dipstick tests. These rely on the peroxidase activity of haemoglobin that acts on the organic peroxides on the dipstick causing a colour change. The conventional definition of haematuria is more than 3 red blood cells per high power field on microscopy. In our unit, non-visible haematuria is investigated by means of an ultrasound scan of the kidneys and a flexible cystoscopy.

The question that we are attempting to answer is ‘‘should a PSA test be performed in men with haematuria?’’ We have reviewed the record of all patients that were referred and investigated for haematuria. Previous studies have reported low rates of prostate cancer in patients with haematuria, ranging from 0.4% [3] to 5.9% [4]. The Canadian Urological Association [5], AUA [6] and British Association of Urological Surgeons/Renal Association joint guidelines do not mention PSA testing. The European Association of Urology does not have guidelines on haematuria investigation. In the National Institute for Healthcare Research Health Technology Assessment of haematuria investigation [7], there was no mention of PSA testing (<http://www.hta.ac.uk/1363>).

Patients and methods

All patients who attended with a referral of haematuria between 1st January 2007 and 31st December 2008 were identified. This included referrals to all of the hospitals served by our Trust. Catchment population for our hospitals is 600,000. In total, there were 1202 referrals, 749 of whom were men. Analysis was retrospective, using clinic letters, case notes and the pathology database. Data collected were age, PSA level (and repeats where relevant), biopsy findings when performed and outcome of those patients with an ‘‘abnormal’’ PSA reading.

Mean age of these men was 66.5 years; 76 were aged <50 years, 555 were aged 50–80 years and 118 were aged >80 years. In total, 511 men (68%) had a PSA blood test. The normal PSA range was taken as per Department of Health Guidelines [8].

Results

Patient demographics along with PSA levels, biopsy figures and prostate cancer diagnosis figures are shown in Table 1. In summary, a PSA test was done in 511 (68%) of all men with haematuria.

Table 1 Patient demographics, PSA, biopsy and prostate cancer diagnosis data stratified by age group.

Age	<49	50–59	60–69	70–79	>80
Normal PSA (oesterling/DOH)	2.5/unspecified	3.5/3	4.5/4	6.5/5	Unspecified (taken as 5)
No. of patients	76	128	222	205	118
No. where PSA measured (%)	25 (33%)	89 (70%)	174 (78%)	168 (82%)	55 (47%)
No. of abnormal PSAs	2 (8%)	13 (15%)	39 (22%)	51 (30%)	29 (53%)
No. of biopsies (% of abnormal PSAs)	0 (0%)	6 (46%)	16 (41%)	18 (35%)	2 (7%)
No. of cancers (% in whom PSA was assessed)	0 (0%)	2 (2.3%), 1 already known	8 (4.6%), 1 already known and 1 diagnosed clinically	12 (7.1%), 2 already known 1 diagnosed clinically	2 (3.6%), 2 diagnosed clinically

Download English Version:

<https://daneshyari.com/en/article/4268540>

Download Persian Version:

<https://daneshyari.com/article/4268540>

[Daneshyari.com](https://daneshyari.com)