

PSA

Declan Cahill
Consultant Urological Surgeon
The Royal Marsden

Should/Can I have a PSA test?

PSA test – Live Well – NHS Choices

www.nhs.uk/Livewell/Prostatehealth/Pages/psa-test.aspx

Home | About | Contact | Tools | Video | Choose and Book | Communities | IPS

Translate | Log in or create an account

NHS choices Your health, your choices

Enter a search term Search

Health A-Z **Live Well** Care and support Health news Services near you

Should I have a PSA test?

Share: [Email] [Twitter] [Facebook] Save: [Google+] [Dribbble] Subscribe: [RSS] Print: [Printer]

View all 116 topics

Popular topics

- Alcohol
- Allergies
- Contraception
- Couch to 5K
- Fitness
- Healthy eating
- Lose weight
- Sexual health



The PSA test is a blood test which can detect the early signs

Useful links

NHS Choices links

- Health A-Z: diagnosing prostate cancer
- Health A-Z: prostate disease
- Health A-Z: rectal examination
- Video: prostate cancer

External links

- Prostate Cancer UK
- UK Prostate Link
- Your prostate: ask a question online

Getting started

Information for men considering a PSA test (PDF, 115kb)

Before having the test

If you're having a PSA test, you should not have:

- an active urinary infection
- ejaculated in the last 48 hours
- exercised heavily in the last 48 hours
- had a prostate biopsy in the last six weeks
- had a digital rectal examination in the last week

Each of these may give an inaccurate PSA reading.

done at a GP surgery, measures the (specific antigen) in your blood.

prostate gland. Some of it will leak into your

9, your PSA level is considered raised

9, your PSA level is considered raised

prostatecanceruk.org

Screening and tests
Check which ones apply to you.

Do you have bladder problems?



BJU Int. 1999 Sep;84(4):470-4.

Prostatic involvement in men with febrile urinary tract infection as measured by serum prostate-specific antigen and transrectal ultrasonography.

Ulleryd P, Zackrisson B, Aus G, Bergdahl S, Hugosson J, Sandberg T.

83% raised PSA, Median 14ng/ml

Urology. 1998 Mar;51(3):455-9.

The effect of ejaculation on prostate-specific antigen in a prostate cancer-screening population.

Stenner J, Holthaus K, Mackenzie SH, Crawford ED.

Division of Urology, University of Colorado Health Sciences Center, Denver 80262, USA.

Mean PSA Change -0.62 ± 0.75 Non significant Baseline at 12 hrs

J Urol. 1992 Jul;148(1):83-6.

The effect of digital rectal examination on the serum prostate specific antigen concentration: results of a randomized study.

Chybowski FM, Bergstralh EJ, Oesterling JE.

Department of Urology, Mayo Clinic, Rochester, Minnesota 55095.

0.4ng/ml. Clinically inconsequential

Urologe A. 2011 Feb;50(2):188-96. doi: 10.1007/s00120-010-2489-z.

[Influencing of the PSA concentration in serum by physical exercise (especially bicycle riding)].

[Article in German]

Kindermann W, Lehmann V, Herrmann M, Loch T.

Institut für Sport- und Präventivmedizin, Universität des Saarlandes, Campus, Gebäude B8.2, 66123 Saarbrücken, Deutschland. w.kindermann@mx.uni-saarland.de

1 hour cycling 1.9 ± 1.7 , 1 hr treadmill 1.0 ± 1.0 . Both significant. Back t

PATIENT DETAILS - please provide multiple contact details Last name: _____ First name: _____ Gender: M / F Address: _____ Telephone No (daytime): _____ Telephone No (evening): _____ Mobile no: _____		GP DETAILS GP name and initials: _____ Practice code: _____ Address: _____ Telephone No: _____ Fax No: _____ Practice email address: _____	
Ethnicity: _____		INVESTIGATIONS REQUIRED FOR REFERRAL PSA (required for urgent referrals criteria 1 & 2) First PSA: _____ Second PSA: _____ MSU (required for urgent referrals criteria 1 - 5): _____ Creatinine level (request at time of referral required for all urgent referral criteria)*: _____	
Dipstick in _____ 60 years _____ suspicious for _____		PATIENT MEDICATION Current medication**: _____ Existing conditions*: _____ *Otherwise please fax current medical history	
DISCUSSIONS WITH PATIENT 1. Has the patient been told about cancer referral? <input type="checkbox"/> 2. Has the patient been given a leaflet? <input type="checkbox"/> 3. Have you told the patient they need to be referred to? <input type="checkbox"/> 4. Have you told the patient they need to be seen within 14 days? <input type="checkbox"/>		INVESTIGATIONS REQUIRED FOR REFERRAL PSA (required for urgent referrals criteria 1 & 2) First PSA: _____ Second PSA: _____ MSU (required for urgent referrals criteria 1 – 5): _____ Creatinine level (request at time of referral required for all urgent referral criteria)*: _____ *Please tick if creatinine result to follow: <input type="checkbox"/>	

- Urgent referrals criteria (tick category)**
- Clinically malignant prostate on rectal examination. PSA result to be sent with referral
 - Raised age related PSA (50-60 >3, 60-69 >4, 70+ >6.5, 85+ >20) on 2 occasions 4 weeks apart, unless the prostate feels malignant or the PSA is over 20 when immediate referral appropriate
 - Visible haematuria in adults >18 years old
 - Non visible haematuria greater than a trace on dipstick in adults > 50 years old
 - Symptoms of UTI with persistent sterile pyuria >60 years old
 - Palpable renal mass, or renal lesion which is suspicious for malignancy identified clinically or radiologically
 - Testicular lump which appears to be intratesticular or solid suspicious of cancer
 - Raised/suspicious penile lesion or phimosis with discharge and/or palpable/hard area beneath prepuce

CLINICAL GUIDELINES AND HOSPITAL CONTACT DETAILS ARE ON THE REVERSE OF THIS FORM



45g



100g



150g

2 WW continued

- Approximately 1/8 of total 62 day (2WW) RMP waits are prostate
- 62 days is tight
- LCA reporting 78.6% for prostate against 85% target
- Performance variation between 38-96%



2 WW case 1

- 55 yr
- No prior LUTS.
- UTI symptoms. PSA at that time 7.7
- Repeat PSA 1.56. BPH o/e
- Discharged



2 WW case 2

- 76 yr
- Significant LUTS.
- PSA 12.7. Repeat PSA 11.10 ng/ml
- PE 2010 and 2013. Warfarinised
- DRE T2
- IPSS 15. Poor flow. PVR 250/100mls
- MRI T2/T3 Large lesion. Grade 5 confidence

- Watch and wait (WW). Treat LUTS with alpha blocker
- Review LUTS and PSA in 6 months
- If PSA progression Androgen deprivation therapy (ADT)
- If LUTS an issue TURP and Bx
- If PSA progression and LUTS then ADT +/- TURP



How can we team up on prostate 2WW?

- Don't do a PSA on men with acute LUTS
- If men have acute LUTS treat them and then do PSA
- Repeat the PSA before referring as that'll be the first thing we do with the clock ticking.
- MSU
- Is he fit for radical treatment?
- If in doubt repeat at 3 months and refer for a rising PSA
- False positives are common, false negatives are rare



LUTS

- IPSS
- FR
- PVR
- Bother
- Rx LUTS in diagnostic pathway
- MRI reflections



BPH Management

- Lifestyle advice
- Alpha blockers
- BNI/TURP
- HoLEP
- Urolift, Rezum



Lead time and screening interval

FIG. 2. Annual screening is likely to detect slow-growing tumours that are unlikely to cause symptoms, whereas fast-growing and fatal tumours are less likely to be detected by annual screening.

