PROSTATE CANCER SCREENING

European Prostate Awareness Day (EPAD) on Prostate Cancer Screening
Brussels, 22/1/19

This is a synopsis of the latest expert information on screening and early diagnosis of PCa given to the European Parliament. To see the full EPAD programme and report, go to:

http://epad.uroweb.org/programme/epad-2019-presentations/

Background

The UK lags well behind its European neighbours for early diagnosis and cure of Prostate Cancer (PCa). Every year 47,000 UK men are diagnosed with PCa and nearly 12,000 die from it[1]. It is our commonest male cancer and second commonest male cancer killer with deaths now exceeding those for breast cancer[2].

As there is no way of preventing PCa, our efforts should be to detect it early when it is confined within the prostate and thus curable. The only practical way to do this is with the blood test PSA (Prostate Specific Antigen); there is no other simple, cheap marker on the horizon.

Since its widespread introduction as a PCa screening tool in the early 1990s, the death rate from PCa has fallen consistently in all countries making significant use of the test. Unfortunately this came at the cost of substantial over-diagnosis and over-treatment of non-aggressive, insignificant PCa that has possibly outweighed the benefits of early diagnosis and cure for many other men. This problem was highlighted by the United States Preventive Services Task Force who decreed in 2012 that these harms outweighed the benefits[3]. As a consequence there has been a downturn in screening both in the USA and the UK, where the death rate has stopped falling and the presentation of cases of metastatic PCa has risen[4,5], raising the spectre of the pre-PSA era when most men presented with advanced, incurable disease. This is unacceptable.

EAU Policy Paper on PSA Screening for PCa

The longest, clinically valid trial evidence on the benefits and harms of PCa screening comes from Europe. The speakers at this event presented clear, objective evidence showing that the benefits now easily outweigh the harms. They then lucidly outlined strategies to implement life-saving, cost-effective screening programmes.

http://epad.uroweb.org/wp_content/uploads/EAU_policy-briefing_PSA.pdf

What follows is therefore not mere opinion, but hard, objective, scientific evidence from screening studies running for up to 20 years.

The Facts

- Since 2012, death rates from PCa in the USA and UK are rising[4,5].
- PSA-based screening trials have reduced PCa mortality by up to 64%[6,7,8].
- After 20 years' follow-up the number of patients needed to screen and to diagnose PCa have fallen to 101 and 10 respectively to prevent 1 PCa death – figures substantially lower than for diagnosing colorectal cancer and breast cancer[6].
- Quality of life studies show that early treatment of PCa lowers the risk of complications such as incontinence and impotence whereas treatment of metastatic disease has a disproportionately negative effect on quality of life for both the sufferer and his partner[9].
- Early measurement of PSA in a man's 40s can largely define his lifetime risk of dying from PCa. Low risk men with consistently low PSAs (<1ng/ml) can stop screening in their 60s as subsequent risk of death from PCa is only 0.2%[10].
- Early PSA measurement should be linked to family history, ethnicity and freely available risk calculators to further define lifetime risk.
- Second line biomarkers provide further information that assists identification of aggressive PCa[11-14].
- mpMRI scans should now be used before biopsy to better target significant disease and avoid the need for biopsy where significant disease is unlikely to exist[15].
- Active surveillance is a proven, safe, management option for "insignificant", low-grade, low-volume PCa[16].
- In the UK treatment options are determined jointly by multi-disciplinary teams and informed patients to avoid over-treatment, the rate of which has fallen to 8%[17].
- The cost of early curative treatment is approximately €15,000[18] compared with approximately €300,000 for long-term treatment of advanced PCa[19].

Conclusion

The UK cannot continue to overlook PCa, our commonest male cancer, now that the twin threats of over-diagnosis and over-treatment are clearly outweighed by PSA-based screening programmes coupled to recent advances in clinical practice.

The UK does not require further screening trials but should implement proven screening strategies[20] based on multi-disciplinary international guidelines[21].

More support and funding should be directed to PCa screening programmes and research.

The evidence is clear. The only thing lacking is the political will.

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February 2019

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