

Should testicular self examination be recommended?

In September 1995 the Imperial Cancer Research Fund patient information leaflet "A whole new ball game. How to check for testicular cancer" was published.¹ This leaflet, funded by the Department of Health, recommends testicular self examination. However, the case for implementing a national screening programme has not been made.

About 1250 new cases of testicular cancer were registered in England and Wales in 1989, an age standardised incidence rate of 45 per million.² About half of the new cases occurred in men under 35, which makes testicular cancer the commonest cancer in men aged 20–34 in England and Wales, but none the less a rare disorder.

In the past few decades there has been a continuous rise in the incidence of testicular cancer in the United Kingdom,^{2,3} United States,⁴ and in most other white populations.⁵ In England and Wales there has been an increase of 28% in the most recent five years for which data are available from 35 per million in 1985 to 45 per million in 1989 (figure). The increasing incidence is only partly explained by the increase in incidence of developmental urogenital abnormalities, decrease in age at puberty, and decrease in amounts of exercise.⁶

The three year survival rates from testicular cancer have increased dramatically from 10% in the 1970s to about 90% in the 1990s.⁷ These increases are mainly due to the introduction of combination chemotherapy.⁸ They explain why the age standardised death rates have been consistently falling (figure)⁹ despite the increasing incidence. In 1993 there were only 103 deaths from testicular cancer in England and Wales.

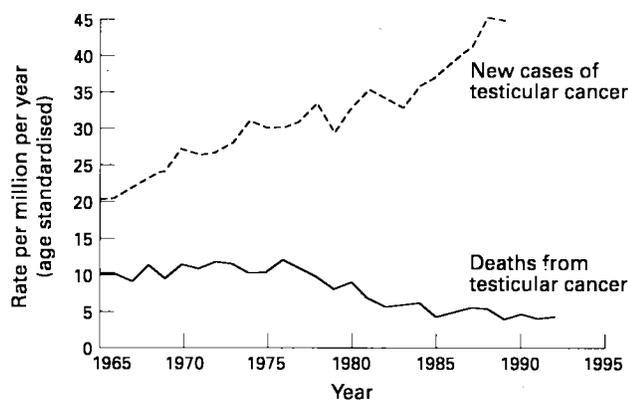
There have been no randomised trials to assess the efficacy and benefit of testicular self examination. In the

unlikely event that testicular self examination reduced mortality by half, 50 000 men would need to carry out regular self examination for 10 years in order for one death to be prevented. During that time there would be much anxiety because of the inevitable false positives, much consultation with general practitioners, themselves anxious not to miss a cancer, and much referral to hospitals. The surgeons in the hospitals would need to perform biopsies on many of the lumps they saw; if they followed a conservative policy and observed the lumps for three to six months they would greatly reduce the number of biopsies but probably also reduce any benefit from the earlier diagnosis of those few lumps that were cancer. If one man in 1000 per year had a surgical biopsy, and screening reduced mortality by half, simple calculations show that there would be 500 surgical biopsies for every death prevented, which in combination with the anxiety is a high cost for saving a life.

Randomised trials to assess the efficacy and benefit of testicular self examination would need to be enormous to detect an effect because of the low death rates from testicular cancer and the high survival rate following clinical presentation. Even without trials, however, we can conclude that the rarity of death from this disease means that screening is unlikely to be worthwhile. Stephen Buetow, in his paper "Testicular cancer: to screen or not to screen?" on page 3, assesses in detail the limited evidence available in the debate on whether to screen for testicular cancer or not and also whether testicular self examination is a useful screening test.

Wolfson Institute of Preventive Medicine,
Queen Mary and Westfield College,
St Bartholomew's and the Royal London
School of Medicine and Dentistry,
Charterhouse Square,
London EC1M 6BQ

J K MORRIS



- 1 Imperial Cancer Research Fund. *A whole new ball game. How to check for testicular cancer*. London: Department of Health, 1995.
- 2 Office of Population Censuses and Surveys. *Cancer statistics: registrations. England and Wales 1965–1990*. London: HMSO.
- 3 Boyle P, Kaye SB, Robertson AG. Changes in testicular cancer in Scotland. *European Journal of Cancer and Clinical Oncology* 1987;23:827–30.
- 4 Brown LM, Pottern LM, Hoover RN, Devesa SS, Aselton P, Flannery JT. Testicular cancer in the United States: trends in incidence and mortality. *Int J Epidemiol* 1986;15:164–70.
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- 6 United Kingdom Testicular Cancer Study Group. Aetiology of testicular cancer: association with congenital abnormalities, age at puberty, infertility, and exercise. *BMJ* 1994;308:1393–9.
- 7 Nikzas D, Champion AE, Fox M. Germ cell tumours of the testis: prognostic factors and results. *Eur Urol* 1990;18:242–7.
- 8 Report from the MRC working party on testicular cancer. Prognostic factors in advanced non-seminomatous germ-cell testicular tumours: results of a multicentre study. *Lancet* 1985;i:8–11.
- 9 Office of Population Censuses and Surveys. *Mortality statistics. England and Wales 1965–1994*. London: HMSO.