On-going and planned clinical outcome analysis

Luke Hounsome

South West Public Health Observatory
Urological Cancer Hub updates

Incidence, mortality and survival for:
- Bladder
- Prostate
- Kidney
- Testicular
- Penile
- Renal Pelvis + Ureter

• Incidence 2006-08
• Mortality 2006-08
• 1 year survival for 2005-07
• 5 year survival for 2001-03
Urological Cancer Hub updates

Prostate Cancer >> Prostate Cancer Incidence - 2006-08 >> DSR per 100,000 men

Urological Cancer Profiles - Cancer Networks

<table>
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<tr>
<th>Indicator</th>
<th>Area</th>
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Kidney Cancer

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Testicular Cancer

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Significantly worse — No significant difference — Significantly better
# Urological Cancer Hub updates

## Prostate Cancer Incidence - 2006-08

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## Kidney Cancer 5 Year Survival...

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## Other Cancer

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Data briefings – stage specific survival

Prostate Cancer Survival

NCIN Data Briefing

Analysis
Survival time for the majority of cancers is affected by the stage at diagnosis, and this is also true for prostate cancer. The increase in prostate-specific antigen (PSA) testing since the late 1990s has increased the proportion of cases diagnosed at stage I or II when the tumour is confined to the prostate.

A cohort of 35,701 men in England with a diagnosis of prostate cancer from 1999 to 2002 was analysed. Information on stage at diagnosis was extracted from registry records and supplemented with existing data from the British Association of Urological Surgeons’ (BAUS) database, where available. Relative survival is calculated by comparing mortality from the disease of interest to background mortality, which is calculated using lifetables supplied by the London School of Hygiene and Tropical Medicine (LSHTM).

Using information to improve quality and choice

September 2010

South West Public Health Observatory

The NCIN is a UK-wide initiative, working closely with cancer services in England, Scotland, Wales and Northern Ireland, and the National Cancer Research Institute (NCRI), to drive improvements in standards of cancer care and clinical pathways by informing and using the information it collects for analysis, evaluation and research. In England, the NCIN is part of the National Cancer Partnerships.
Data briefings – teratoma of the testis

Differentiated Teratoma of the Testis

NCIN Data Briefing

Background and method

There has been a recent recommendation to code differentiated teratomas of the testis as a malignant tumour (cancer). This data briefing examines the epidemiology of this rare type of testicular tumour and considers the likely impact of such a change in coding.

To ensure that all relevant tumours were identified, the following ICD-10 codes were used: C61. Malignant neoplasm of the testis (D07.6). Carcinoma in situ of other and unspecified germinal epithelium (D40.7). NOS (not otherwise specified) which includes neoplasms of uncertain or unknown behaviour of testis.

Results

The proportion of testicular tumours (C61, D07.6 and D40.7) registered with a morphology code of ‘teratoma, malignant, not otherwise specified (NOS),’ which includes differentiated teratomas, decreased over the time period studied, from 28% of testicular tumours in 1985 to 7% in 2005. Swopcharts show a peak in 1995, and have been increasing in isolation since 1995. The proportion of mixed germ cell tumours increased from less than 1% in 1985 to 14% in 2005.

Five most common histological types of testicular tumours, England 1980–2005

Conclusions

As for testicular tumours in general, age-specific rates of teratomas are higher in younger age groups of males. The rate of differentiated teratomas is highest in the 35–55 years age group. The total number of differentiated teratomas is highest in males aged 35–55 years.

Incidence of differentiated teratomas of testis by age compared with incidence of testicular teratomas. Age-specific incidence rates per 100,000 male population and number of tumours, England 1985-2005.

The National Cancer Intelligence Network is a UK-wide initiative, working to deliver improvements in standards of cancer care and clinical outcomes by improving and integrating information collected about cancer patients for analysis, publication and research. Situated within the National Cancer Research Institute (NCRI), the NCIN works closely with cancer services in England, Scotland, Wales and Northern Ireland. In England, the NCIN is part of the National Cancer Programme.
Differentiated Teratoma of the Testis

**NCIN Data Briefing**

**Background and method**

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To ensure that all relevant tumours were identified, the following ICD-10 codes were used: C66. Malignant neoplasm of the testis, D40.6. Carcinoma, in situ or unspecified, malignant, and D46.7. Neoplasms of uncertain/malignant behaviour.

**Results**

The proportion of testicular tumours (C66, C66.6 and C66.7) registered with a morphology code of "cancer, malignant, not otherwise specified (NOS)" which reduces differentiated teratomas, decreased over the time period studied, from 28% of testicular tumours in 1980 to 8% in 2005. However, there was an increase in the proportion of mixed germ cell tumours from 5% in 1980 to 14% in 2005.

Five most common histological types of testicular tumours, England 1990–2005

![Graph showing the distribution of testicular tumour types](image)

Source: National Cancer Data Repository

**Conclusions**

The decreasing number of testicular tumours which are registered as teratoma, malignant, NOS is likely due to better reporting of pathology data which allows more precise histological identification. The remaining registrations of testicular, malignant, NOS will reflect the true number of differentiated testicular cancers, so an upper estimate of around 150 cases per year can be assumed. If these 150 cases are included in the total number of malignant testicular cancers (C66.6), then the incidence rate will increase by about 5%. The age distribution of differentiated teratomas is different from that of testicular cancer in general, so the age-standardised rate may increase by more or less than the crude rate.

**Keywords**

- Differentiated teratoma
- Malignant testicular tumour
- Epidemiology

www.nhin.org.uk/teratoma

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Report – survival after cystectomy

Survival in patients treated by cystectomy for bladder cancer
Urological Cancers SSCRG

Source: National Cancer Intelligence Network, NHS Cancer Intelligence Team, Department of Health and Social Care, Office for Health Improvement and Protection.
Report – survival after cystectomy

• Compared survival 1999-2001 (pre IOG) and 2005-07 (post IOG)

• Relative survival has increased
  • at 1 month (1.8% points)
  • at 1 year (5.1% points)
  • at 3 years (6.8% points)

• Survival from muscle-invasive disease has not increased (hampered by small numbers)

• Stage-specific survival has not changed (small numbers again!) but stage III now overlaps I and II, rather than IV
What’s on the plan this year?

• Treatment pathways - making use of the radiotherapy data now available
• Radiotherapy in ‘high-risk’ patients
• Rare urological cancers
• Prostate cancer mortality
• High-grade bladder cancer

.
Rare cancers – penile

- Incidence increasing in 60-79 year olds, seems to be falling in 80+
- 50% higher rate in most deprived areas

- Mortality unchanging overall
- Falling in the 80+ group
- Over 2.5 times higher mortality in most deprived areas
www.swpho.nhs.uk/urologicalcancerhub