

Differentiated Teratoma of the Testis

NCIN Data Briefing

Background and method

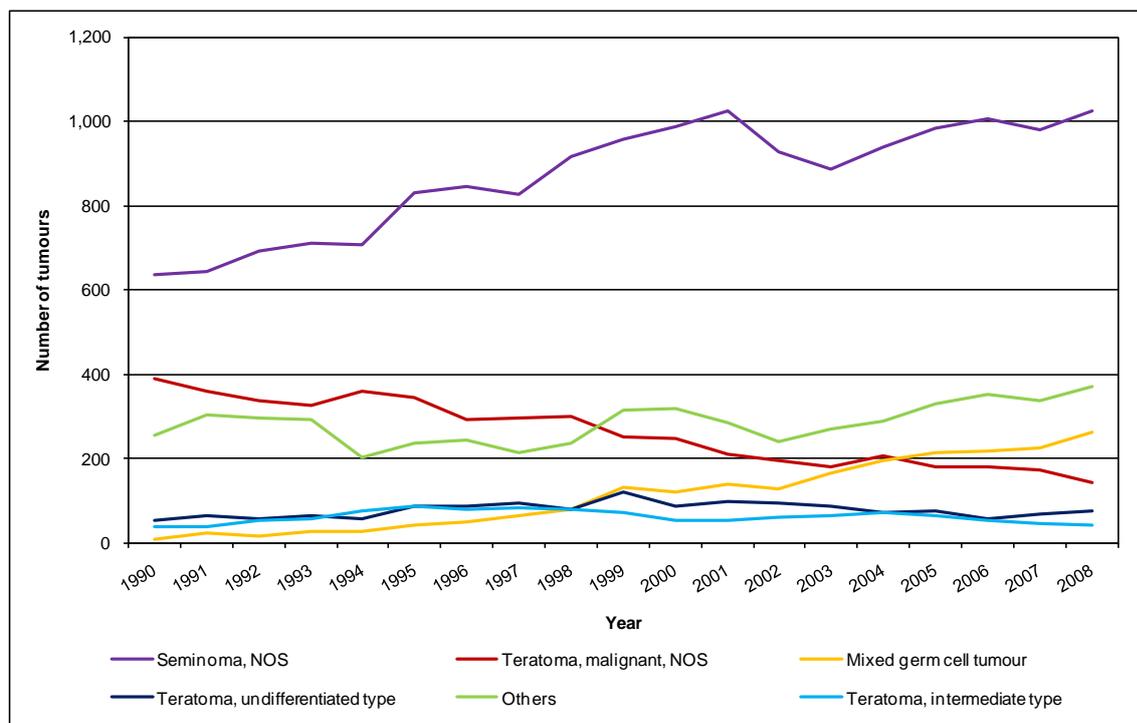
There has been a recent recommendation by the NCIN Urology Site Specific Clinical Reference Group (SSCRG) to the UK Association of Cancer Registries (UKACR) to code differentiated teratoma of the testis as a malignant tumour (cancer). This recommendation has not been accepted by UKACR because it conflicts with the coding rules in International Classification of Disease (ICD) O3. UKACR have proposed instead to try to influence the coding of testicular tumours in ICDO4. In the meantime, UKACR have agreed to ensure all testicular tumours are registered to allow analyses reflecting the views of the SSCRG. This data briefing examines the epidemiology of the main types of testicular tumours, 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: 'C62: Malignant neoplasm of the testis', 'D07.6: Carcinoma in situ of other and unspecified male genital organs' and 'D40.1: Neoplasm of uncertain or unknown behaviour of testis'.

Results

The proportion of testicular tumours (C62, D07.6 and D40.1) registered with a morphology code of 'teratoma, malignant, not otherwise specified (NOS)', which includes differentiated teratoma, decreased over the time period studied, from 28% of testicular tumours in 1990 to 7% in 2008. Seminomas made up over half of testicular tumours in 2008 (53%), and have been increasing in proportion since 1990. The proportion of mixed germ cell tumours increased from less than 1% in 1990 to 14% in 2008. Investigation of the detailed pathology and coding of these tumours is required to understand these changes in distribution of morphology types, and will be undertaken in future.

Five most common histological types of testicular tumours, England 1990–2008



Source: National Cancer Data Repository

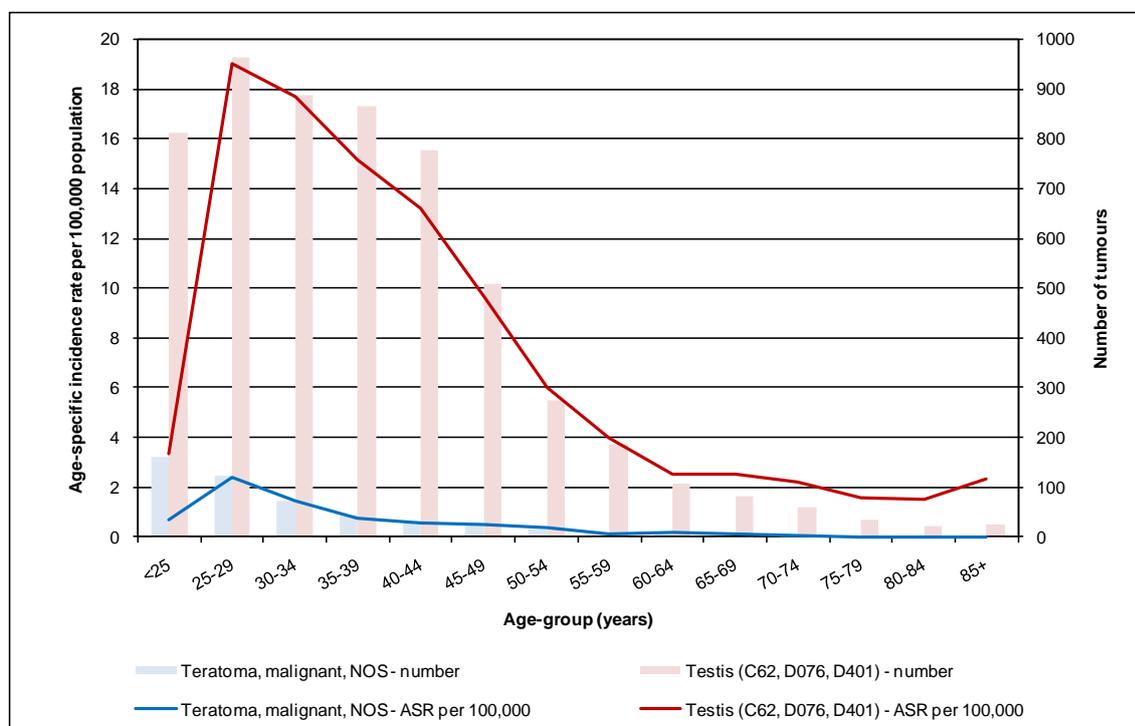
KEY MESSAGE:

Differentiated teratomata account for about 7% of the total of both malignant and benign tumours of the testis.

Registering them as malignant will increase the number of testicular cancers in England by about 150 each year.

As for testicular tumours in general, age specific rates of teratoma are higher in younger age groups of males. The rate of teratoma is highest in the 25–29 year-old age group, while the number of teratomata is highest in males aged under 25 years.

Incidence of differentiated teratoma of testis by age compared with incidence of testicular tumours, age-specific incidence rates per 100,000 male population and number of tumours, England 2006–08



Conclusions

The decreasing number of testicular tumours which are registered as ‘teratoma, malignant, Not Otherwise Specified (NOS)’ is likely due to better reporting of pathology data which allows more precise histological identification. The remaining registrations of ‘teratoma, malignant, NOS’ will better reflect the true number of differentiated teratomata, 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 (C62) incident each year (currently about 1,800), the crude rate will increase by about 8%. The age distribution of differentiated teratoma is different from that of testicular cancer in general, so the age-standardised rate may increase by more or less than the crude rate.

Investigation of the registration of testicular tumours over time is necessary for better understanding of how differentiated teratoma has been coded, and to improve data quality.

FIND OUT MORE:

South West Public Health Observatory (SWPHO)

SWPHO is the lead Cancer Registry for urological cancers

<http://www.swpho.nhs.uk>

Other useful resources within the NCIN partnership:

Cancer Research UK CancerStats – Key facts and detailed statistics for health professionals

<http://info.cancerresearchuk.org/cancerstats/>

The National Cancer Intelligence Network is a UK-wide initiative, working to drive improvements in standards of cancer care and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research. Sitting 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.