Soft Tissue Sarcomas: incidence and survival rates in England

NCIN Data Briefing

What are Soft Tissue Sarcomas?

Soft tissue sarcomas account for approximately 1% of all malignant tumours. They are cancers that develop in the soft tissues connecting and surrounding other organs of the body. The majority affect limbs or the trunk but they can be found in other sites including the breast, stomach, skin and uterus. The invasive soft tissue sarcoma morphology codes included within the analysis were agreed with the sarcoma SSCRG. A list of these codes can be supplied on request.

Incidence Rates

Approximately 2,300 people were diagnosed annually with soft tissue sarcoma in England between 1990 and 2007. There were no significant differences in age-standardised incidence rates between males and females. More than 65% of cases occurred in people aged 50 and over. Between 1990 and 2007, the incidence rate increased significantly by 26%. However, it is uncertain if these increases are caused by true rises in incidence, improved awareness and diagnosis, or better reporting and coding.

Figure 1: Age standardised incidence rates of soft tissue sarcomas, England, 1990-2007

Approximately 60% of soft tissue sarcomas were assigned to the local organs where the tumours occurred and the remaining 40% to the general site “connective and soft tissue” (Figure 2). The “connective and soft tissue” site can be split into sub-sites (Figure 3).

Figure 2: Incidence of soft tissue sarcoma by cancer site, England, 1990-2007

Figure 3: Sub-site incidence of connective and soft tissue, England, 1990-2007

KEY MESSAGE:

The recorded incidence of soft tissue sarcomas has increased over the past 18 years, although this may be due to improved reporting.

Incidence by morphology varies on a very short timescale and is likely to reflect improving diagnostic techniques.

5-year survival is only 51%, and has not changed significantly over the 12 years analysed.
Types of Soft Tissue Sarcoma

The majority of soft tissue sarcomas occur in patients aged 50 and over (Figure 4), an age profile similar to many carcinomas. However, the age profile of patients diagnosed with soft tissue sarcoma depends on the morphology of the sarcoma. Leiomyosarcomas and liposarcomas are two examples of a soft tissue sarcoma which is most common in the elderly, rhabdomyosarcomas are most common in children and adolescents, and synovial sarcomas have a higher occurrence in young adults.

**Figure 4: Percentage of sarcomas and selected morphologies by age, England, 1990-2007**

Survival Rates

The 5-year relative survival for soft tissue sarcomas diagnosed in England was only 47% for patients diagnosed in 1990 and 51% for patients diagnosed in 2002. This small improvement is not statistically significant.

**Figure 5: Five-year relative survival rates* for soft tissue sarcomas, England, 1990-2002**

*The relative survival estimates shown are defined as the ratio of the observed probability of survival and the probability of survival that would have been expected had the patients experienced the normal (background) mortality of the population in which they live, given the same distribution of factors such as age and sex.

FIND OUT MORE:

West Midlands Cancer Intelligence Unit
WMCIU is the National Cancer Intelligence Network lead cancer registry for sarcomas
http://www.wmpho.org.uk/wmcIU

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 outcomes by improving and using the information it collects for analysis, publication and research. In England, the NCIN is part of the National Cancer Programme.