Co-morbidities of bone sarcoma patients

KEY MESSAGE:

Over a fifth of bone sarcoma patients recorded in HES have co-morbidities. These occur mainly in patients aged 50 and over.

The most common co-morbidity is pulmonary disease in which asthma and chronic obstructive pulmonary disease dominate; the latter being most common in patients aged 80 years or more.

Co-morbidities affect treatment options and outcomes for bone sarcoma patients, but they are difficult to measure and are not routinely recorded. Hospital Episode Statistics (HES) record other conditions for which bone sarcoma patients have been admitted to hospital. These can be used to produce an estimate of co-morbidity based on the Charlson co-morbidity index.

Co-morbidities occurring within the two years prior to diagnosis were identified in 22% of bone sarcoma patients diagnosed between 2000 and 2007. Figure 1 demonstrates how the Charlson co-morbidity scores increased with age; only 12% of patients under 30 had a recorded co-morbid condition compared to 33% of those aged 50 and over. There was very little variation in the average Charlson co-morbidity score between the ages of 0 and 49, but this increased dramatically in the elderly.

The most common co-morbid conditions that bone sarcoma patients presented with are shown in Figure 2. Pulmonary conditions affected over 50% of 0-30 year olds with a co-morbid condition present compared with less than 25% of patients aged 50 and over. 19% of patients aged 50 and over with co-morbidity had another primary cancer within the specified period, and 15% of patients within this age range had diabetes. Asthma was the predominant respiratory condition present in the majority of age groups, but the elderly were also affected by other chronic obstructive pulmonary diseases (COPD).

Figure 1: Proportion of patients with a co-morbid condition

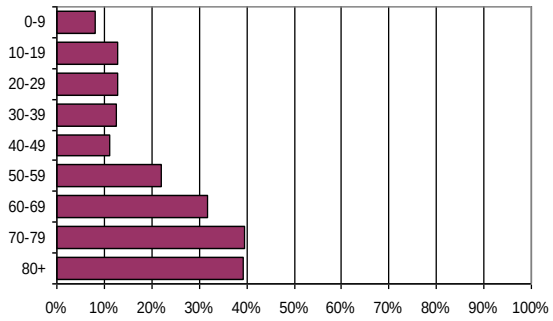
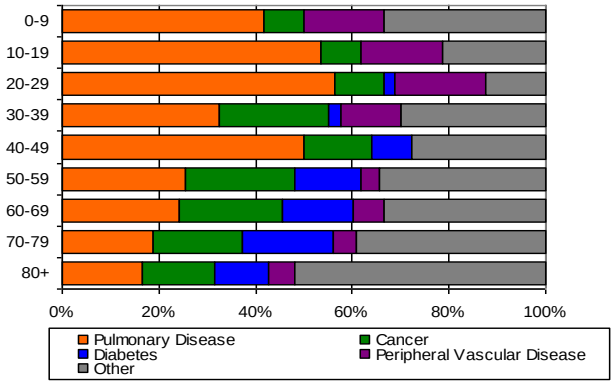


Figure 2: Most common co-morbid conditions in each age group



Hospital admissions enable severe co-morbidities to be identified which can then inform further analysis into treatment patterns and outcomes. However, the proportion of patients with co-morbidities requiring inpatient hospital treatment is only a subset of all the patients with co-morbidities, limiting the usefulness of this methodology.

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

More detailed account of the methodology employed to derived co-morbidity scores in bone sarcoma patients
http://www.ncin.org.uk/cancer_type_and_topic_specific_work/cancer_type_specific_work/default.aspx#sarcoma

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.