The characteristics of individuals with colorectal cancer who die rapidly after their diagnosis

NCIN Data Briefing

Background

Compared to elsewhere in Europe, survival from colorectal cancer in England is poor. Evidence suggests that this may be due to an unexpectedly high proportion of English patients with rapidly fatal disease. It is not clear why so many people should die so quickly. This study aimed to quantify the characteristics of colorectal cancer patients in England who die within one year of diagnosis in order to provide a greater understanding of the factors associated with early mortality.

Methods

Information on all individuals diagnosed with colorectal cancer between 2006 and 2008 were extracted from the National Cancer Data Repository and grouped according to whether the individuals concerned had died within a month, 1 to 3 months, 3 to 12 months or greater than 12 months from diagnosis. The characteristics of the individuals in each group were then compared.

Results

During the period examined 91,980 individuals were diagnosed with a first primary colorectal cancer. Figure 1 shows that 9.9% of this population died within a month of diagnosis. The majority (68.9%) however, survived, for over a year.

Figure 1 – Overall Survival (short term)

Proportion of individuals:
- Died within one month of diagnosis
- Died within 1 to 3 months of diagnosis
- Died within 3 to 12 months of diagnosis
- Survived for at least 12 months from diagnosis

Figure 2 shows that a much higher proportion of elderly patients died within a month of diagnosis (with 56% of those dying within 1 month of diagnosis being ≥80 years age).

KEY MESSAGES:

Almost 10% of people diagnosed with colorectal cancer die within one month of diagnosis.

56% of people dying within one month are 80 or more years old.

60% of early deaths present initially as emergency cases to hospital.

At least 50% of patients who die within one month receive no active treatment.

Raising the level of public awareness of colorectal cancer and increasing early diagnosis may help to improve survival rates for colorectal cancer.

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.

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Likewise, a much greater proportion of patients who died rapidly had advanced disease at diagnosis or had disease whose extent had not been recorded than those who survived for longer periods (Figure 3).

Individuals dying rapidly were significantly more likely to have presented to the NHS as an emergency or did not attend an NHS hospital at all than those who survived for more than a month (Figure 4).

Finally, individuals in the groups who died soon after diagnosis were more likely to have no active treatment or receive operations that tend to be associated with palliative intent such as bypass surgery, formation of a stoma alone or insertion of a stent (Figure 5).

Conclusions
The results of this study suggest that individuals who die rapidly from colorectal cancer tend to present, often as an emergency, with advanced disease that is not amenable to potentially curative treatment. The majority of patients who die rapidly are also from older age groups.

To improve survival from colorectal cancer in England it will be essential to reduce the number of these rapidly fatal cases of the disease. Public health interventions that increase public awareness of the illness and help to ensure that colorectal cancer is diagnosed at the earliest time point possible are, therefore, required. The NHS Bowel Cancer Screening Programme (that has recently been introduced across England) is such an intervention. Routine screening for the disease is now offered to all from the age of 60 and early evidence indicates the programme is effective at diagnosing cancers at an earlier stage. Participation in the programme should be encouraged. Likewise the National Bowel Cancer Awareness Campaign which seeks to raise awareness and encourage people with persistent symptoms to see their GP will be important.