Stage at diagnosis and colorectal cancer survival

This is the first scientific study to compare colon and rectal cancer survival by stage internationally. It was published in the scientific journal, Acta Oncologica. Six countries – Australia, Canada, Denmark, Norway, Sweden and the UK – took part in this international comparison. The study looked at the proportion of people who were still alive one and three years after their colon or rectal cancer diagnosis (one-year and three-year survival) in each country and also compared at which stage people’s cancers had been diagnosed.

Wide differences in international stage distributions and survival exist between the countries in this study. Survival and stage distribution for colon (large bowel) and rectal (back passage) cancer were investigated separately in this study. Colon cancer is more commonly diagnosed early (stage A) in Canada, at intermediate stages (stage B and C) in Sweden and the UK, and at an advanced stage (stage D) in Denmark. The stage distribution for rectal cancer was similar in Canada, Norway and Sweden – with 45-52% of cancers diagnosed at stage A and B, around 25-30% at an intermediate stage and 21-23% diagnosed at the latest stage. Denmark had the highest proportion of patients diagnosed at the latest stage, D. Colon and rectal cancer patients in the UK were less likely than in other countries to be diagnosed at the latest stage (19% stage D in the UK compared to 31% in Denmark). The UK had the highest proportion of colon and rectal cancers diagnosed at stage C, an intermediate stage, compared to the other countries. The study found that the UK and Denmark had the lowest one-year colon and rectal cancer survival of the six countries. Survival was intermediate in Norway and Canada for colon cancer and highest in Sweden and Australia. Survival was intermediate in Norway for rectal cancer and highest in Sweden, Canada and Australia.

Treatment and late diagnosis may partially explain the differences between countries in the proportion of people who survive colon and rectal cancer. Survival differences could also be impacted by inaccurate or incomplete recording of stage information which may lead to the patient receiving inappropriate treatment. Late diagnosis appears to be contributing to poor survival in colon and rectal cancers in the Denmark.

There was a large difference in how many records were missing information on stage at diagnosis for colon and rectal cancer. The UK was the worst at recording stage at diagnosis; three out of ten colon and rectal tumours had stage at diagnosis data missing.

If you are interested in reading the abstract of this paper, ‘Stage at diagnosis and colorectal cancer survival in six high-income countries: A population-based study of patients diagnosed during 2000-2007’, you can find it on the London School of Hygiene and Tropical Medicine’s web page.