Survival of colorectal cancer patients in the German federal state of Lower Saxony in comparison to the United States

E. Sirri[1], C. Vohmann[1], J. Kieschke[1]
[1] *Epidemiologisches Krebsregister Niedersachsen, Registerstelle, Oldenburg, Niedersachsen, Deutschland*

Inhalt

Aim: In Germany and the United States (US), organized screening for colorectal cancer (CRC) has not been implemented. We aimed to report up-to-date 5-year relative survival (RS) for CRC in Lower Saxony (LS) and the US.

Methods: Data was analyzed of patients 15+ years old diagnosed 2003-2014 with CRC (ICD-10 C18-C20), extracted from the epidemiological cancer registry of LS and from the Surveillance, Epidemiology and End Results (SEER 18) database. Mortality follow-up was until December 2014. Period analysis was employed to compute 5-year RS by sex, age group, morphology, site and to obtain trends for patients diagnosed in 2003-2008 (period 2008) and 2009-2014 (period 2014)**.**

Results: A total of 52,916 (LS: men 28,401, women 24,515) and 119,554 (US: men 62,470, women 57,084) CRC patients were included. The median ages in years were: men 70, women 74 (LS), men 64, US women 67(US). The overall age-standardized 5-year RS for patients diagnosed with colon and rectum cancer was 65.5% (SE 1.0) and 63.8% (SE 1.3) in LS. In the US, 63.3%(SE 0.3) and 64.0% (SE 0.6). Women survived longer overall and at almost all sublevels compared to men in both regions. Survival reduced with increasing age in both regions. Patients with adenocarcinoma in polyps survived longest with a 5-year RS of over 80% in both regions compared to other morphologies. Location of cancer was a strong prognostic factor, with a 5-year RS of up to 73.6% (SE 4.6) for transverse colon cancer in women in LS. A 7 percent points difference in patients with rectosigmoid cancer in LS 68.9 (SE 3.8) compared to the US 61.9 (1.0) was observed. Overall, survival was slightly lower for the period 2014 compared to the period 2008 by 0.8 and 1.9 percent points in LS and the US.

Conclusion: Differences between LS and the US, especially in median ages and survival of patients with rectosigmoid cancer should be further assessed. In the context of screening, it is difficult to attribute its effects on incidence and survival.