Influence of hospital volume on local recurrence and survival in a population sample of rectal cancer patients.

AIMS: To investigate the role of hospital volume and individual hospitals on long term outcomes (local recurrence and survival) of rectal cancer patients. METHODS: One thousand thirty-eight patients with rectal cancer were diagnosed between 1996 and 1998. From these, we analysed 884 patients with a resected invasive primary rectal cancer. Median follow-up was 5.7 years. The impact of hospital volume (30 rectal cancer patients annually) on local recurrence and survival was examined in a Cox model. Differences between the four largest clinics in the high volume group were also investigated. RESULTS: In the multivariate model predicting survival the following variables were significant: UICC stage, grade, age, local recurrence, and (neo-) adjuvant therapy treatment. In the multivariate model predicting local recurrence UICC stage, tumour localisation, and neoadjuvant therapy treatment were significant variables. Hospital volume was not a significant factor for survival or local recurrence. Within the high volume category one hospital showed significantly worse local recurrence rates than all other hospitals, but no survival difference could be seen between the four largest hospitals of the high volume group. CONCLUSIONS: This analysis of a rectal cancer population found that hospital volume did not determine survival or local recurrence. Detailed clinical data with long term follow-up
Data from cancer registries are vital to demonstrate the quality of routine care.