

In this issue

Prognostic markers for pancreatic cancers

Pancreatic cancer is one of the most lethal cancers of the gastrointestinal tract. It is notorious for late presentation, early and aggressive local invasion, metastatic potential and poor outcome. Only 20% of pancreatic cancers are amenable to surgical resection at presentation and despite the medical advances made over the last 20 years, pancreatic cancer patients would appear to have benefited the least in terms of survival. It is of great interest therefore to discover molecular markers that can be linked to tumour clinicopathology. In this issue of *EJC*, Garcea and colleagues have conducted a systematic review of molecular markers in pancreatic cancers and their correlation with tumour stage/grade, response to chemotherapy and long term survival. The authors found that as with other cancers, the many pancreatic cancer markers under evaluation included oncogenes/tumour suppressor proteins; apoptosis proteins; growth factors and their receptors; proteins relating to extracellular proteins and tumour-stroma interactions and those involved in angiogenesis. The authors speculate that the advent of gene microarray and mass spectrometry techniques allows the measurement of various molecular markers simultaneously and to identify a 'protein signature' that could be used to diagnose pancreatic tumours and lead to better prognosis.

Colorectal cancer survival in France

Colorectal cancer survival dramatically increased over the years between 1976 and 1999 in France. In this issue of *EJC*, Mitry and colleagues have analysed trends in relative survival among 5874 patients diagnosed with colorectal cancer over the same 24-year period in a well-defined French population to explore the reasons underlying the improvement in survival. It is already known that cancer survival improvement may be related to progress in diagnostic or therapeutic procedures and that reduced operative mortality between 1976–1979 and 1983–1987 is one reason for the improvement in French colorectal cancer survival after curative surgery. In the current study, Mitry shows that the 5-year relative survival rate, excluding operative mortality, increased from 49.2% to 56.3% between 1976–1987 and 1988–1999 periods and that this was associated with tumour stage at diagnosis and adjuvant chemotherapy. The improvement in overall survival in older patients was possibly attributed to increased proportion of patients resected for cure. However for younger patients, there was an increase in the proportion of patients operated but also an improvement in stage-specific survival, particularly for stage III tumours suggesting an impact of adjuvant chemotherapy.

Breast conserving surgery and radiotherapy: effect of *BRCA* mutations on recurrence

Breast conservative surgery and radiation therapy is standard treatment for early stage breast cancer. *BRCA1* and *BRCA2* mutations are associated with a strong risk of breast cancer, which may preclude breast-conserving treatment in carriers. *BRCA1* and *BRCA2* proteins are also involved in DNA repair in response to ionising radiation. The safety of breast conservation treatment with radiotherapy in patients with *BRCA* mutations is under debate, because of the potential of ionising radiation to induce new primaries in the treated breast. In this issue of *EJC*, Kirave and colleagues have investigated the influence of *BRCA1* and *BRCA2* mutations on the rate of breast cancer recurrence following conserving surgery and radiotherapy. *BRCA1* and *BRCA2* genes were screened for germline mutations in 131 patients with a family history of breast and/or ovarian cancer. These patients were matched to 261 others without familial breast cancer history according to age at diagnosis and year of breast conserving treatment. No significant differences in breast cancer recurrence as first event were seen between the different sets of patients, carriers and controls. Age however was the most important factor in significantly predicting breast cancer recurrence. These results support the hypothesis that breast tumours in *BRCA* carriers are more sensitive to radiation and breast-conserving treatment can be offered to these patients.