1997 and July 2000. Those with newly diagnosed tumors ($n = 565$) were included in the recent analysis. Using questionnaire forms, data were gathered on clinical presentation, perioperative care, adjunctive therapies, and survival, along with information on general health status and sociodemographic factors. These data were collected at enrollment, during the perioperative period and then every 3 months, up to 2 years or until death.

About a quarter of the newly-diagnosed patients had grade 3 tumors, and these patients tended to be younger and to have better performance status than those with grade 4 disease. In both groups, headache was the most frequent presenting symptom, although nearly a third of patients had experienced seizures. In most cases, symptoms had appeared less than a month before presentation. The majority of patients underwent assessment by MRI (92%) or CT (74%).

Resection of the tumor was attempted in most of the patients (75%); technical adjuncts (intraoperative image guidance or cortical mapping) were used rarely. Most patients (87%) received adjuvant radiation therapy, whereas only 54% received chemotherapy. Perioperative corticosteroids were widely prescribed, as were antiepileptic medications, although the latter have been shown to be of limited value in patients who have not experienced a seizure. Fewer than 10% of patients received antidepressants or prophylactic low-dose heparin; there was evidence that these agents were underprescribed.

In summary, the study has provided benchmark data on the treatment of malignant glioma and has highlighted areas for further investigation. The authors suggest that new clinical guidelines might help to reduce the observed inconsistencies in patterns of care.

**Original article** Chang SM *et al.* (2005) Patterns of care for adults with newly diagnosed malignant glioma. *JAMA* **293:** 557–564

## Depression and anxiety among breast cancer patients

An observational cohort study from the UK has measured the prevalence of depression and anxiety in women with early stage breast cancer, and has highlighted corresponding risk factors.

Burgess *et al.* identified 222 women with early stage breast cancer, of whom 202 (91%) completed an initial interview five months after diagnosis; 170 (77%) provided further interview data up to either five years from diagnosis or recurrence of disease. Based on standardized diagnostic criteria, the patients were classified as full case, borderline case or non-case for anxiety, depression or both.

The results showed that almost half of the women in the cohort experienced anxiety and/or depression in the year following their diagnosis of breast cancer, a prevalence twice that of the general female population. After one year, depression and anxiety returned to normal levels, but unsurprisingly, women who experienced recurrence of disease were again at risk. Previous psychological treatment predicted anxiety and/or depression in the phase immediately before and after diagnosis, as well as in the longer term; whereas lack of an intimate confiding relationship with a cohabiting partner, severely stressful life experiences unrelated to cancer, and younger age were identified as risk factors only in the longer term.

The study underlines the importance of effective psychological interventions in women diagnosed with breast cancer, and for social support when needed.

**Original article** Burgess C *et al.* (2005) Depression and anxiety in women with early breast cancer: five year observational cohort study. *BMJ* [doi: 10.1136/bmj.38343.670868.D3]

## Mutation screening in colorectal cancer

Mutation analysis in patients with inherited forms of colorectal cancer generally relies on genomic DNA sequence analysis, but certain types of mutation can be missed using this method. Large genomic deletions, for example, are masked by the presence of the normal allele. Casey *et al.* have investigated conversion analysis—based on the separation of the chromosomes into hybrid cell lines and analysis at the mRNA level—as an alternative means of detecting mutations in these families.

Using the Colon Cancer Family Registry, the team identified 89 patients with colorectal cancer who were judged likely to carry a