

Brain tumours are fortunately uncommon, but figure prominently within the differential diagnosis of many neurological presentations and more so when paraneoplastic conditions are considered. With modern imaging the diagnosis of tumours has become easier, though management issues have become more complex. The increasing availability of cross sectional imaging has resulted in neurologists being less involved in diagnosis but more in the management of tumour related symptoms; diagnosing possible paraneoplastic syndromes and evaluating neurological presentations in those with known malignancies. These and the development of neuro-oncology as a subspecialty interest requires the “generalist” neurologist to have a broad understanding of the manner in which malignancy effects the nervous system.

This supplement commences by considering primary central nervous system tumours. Peter Collins sets the scene by providing us with a definitive, more detailed than usual, account of the complexities of brain tumour classification with insights into the possible molecular processes involved in oncogenesis. The importance of these molecular findings for more targeted future treatments is emphasised. Patients can be expected to ask their neurologist why they came to develop their tumour in the first place. Patricia McKinney answers many of these questions by reviewing the incidence, survival, and potential risk factors, particularly environmental exposures. Robin Grant provides an overview of diagnosis and management, emphasising the recently introduced Royal College of Physicians guidelines for neurosurgery and radiation oncology. Roy Rampling, Alan James, and Vakis Papanastassiou explore the current and future management options for malignant brain tumours. Ian Whittle helps clarify the diagnostic and management dilemmas that face us and our patients with suspected low grade glioma.

Metastatic disease is encountered commonly in neurological outpatient and hospital practice, and knowing what realistic outcome to expect and when and how to investigate may be difficult. To help resolve these issues, the clinical oncologist’s approach to presentation and management of brain, spine, and meningeal metastatic disease is considered by Georgina Gerrard and Kevin Franks. Here the importance of assessing the overall clinical state of the patient in deciding upon the best treatment options is again emphasised. The Karnofsky rating scale,¹ while “long in the tooth”, remains the most widely used instrument and is reproduced below.

Finally, Jeremy Rees explores the doubly difficult paraneoplastic syndromes, difficult to diagnose and difficult to manage. The range of clinical phenotype, value of anti-neuronal antibody detection, and the importance in finding the causal neoplasm is all stressed.

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KARNOFSKY RATING SCALE (usually expressed as %)

- 100** Normal; no complaints; no evidence of disease
- 90** Able to carry on normal activity; minor signs or symptoms of disease
- 80** Normal activity with effort; some signs or symptoms of disease
- 70** Cares for self; unable to carry on normal activity or to do active work
- 60** Requires occasional assistance, but is able to care for most of own needs
- 50** Requires considerable assistance and frequent medical care
- 40** Disabled; requires special care and assistance
- 30** Severely disabled; hospitalisation indicated although death not imminent
- 20** Very sick; hospitalisation necessary; active, supportive treatment necessary
- 10** Moribund, fatal processes progressing rapidly
- 0** Dead

REFERENCE

- 1 **Karnofsky DA**, Abelmann WH, Craver LF, *et al*. The use of nitrogen mustards in the palliative treatment of cancer. *Cancer* 1948;**1**:634–56.

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