Our non-neurological colleagues sometimes suggest, with tongue in cheek (we hope), that neurologists are not needed now that they can “order” magnetic resonance scans. First and foremost investigations are never “ordered” but “requested”, this often involving discussion with the general or neuroradiologist of the specific case in mind. The Royal College of Radiologists guidelines, Making best use of a Department of Clinical Radiology, emphasises the importance of good communication. The guideline states that a referral is a request for an opinion, that it should be accurately and legibly made, that discussion is important, and regular clinico-radiological meetings are recommended. These are all essential ingredients of good practice.

Neurology and neuroradiology are separate and distinct specialities. Yet imaging of the nervous system is so important in the diagnosis and management of patients with neurological disease that neurologists have to know more than a fair amount about it. Indeed in treating acute stroke with thrombolitics the neurologist may be the sole interpreter of the out of hours scan. Imaging has an ever increasing role not just diagnostically but also for informing prognosis and helping select and monitor the effects of specific treatments. In light of this, how much neuroradiology does a neurologist need to know? This supplement aims to explore this.

We start with a series of articles that focus on the use of imaging in important diagnostic categories. Tuuli M Salmenpera and John S Duncan discuss imaging in epilepsy, S Anand Trip and David H. Miller consider imaging in multiple sclerosis, and Keith Muir and Celestine Santosh address imaging in stroke and transient ischaemic attack.

Imaging of specific parts of the nervous system pose different problems. Ian Bone and Donald Hadley discuss the combined clinico-radiological approach to the investigation of syndromes of the orbital fissure, cavernous sinus, cerebellopontine angle, and skull base.

Most neurology in the UK is done outside neurological centres and much of the imaging of the nervous system is undertaken and reported by non-neuroradiologists in district general hospitals. Evelyn Teasdale provides her insights into survival without on site neuroradiology, giving advice on how to develop a service and on how to most efficiently use the different imaging modalities available there.

Finally, Shelley Renowden provides a grand tour of the astonishing developments within interventional neuroradiology. This article breaks with our normal format, being a wide ranging, heavily referenced review of the “state of the art” for the non-expert.

REFERENCE