

Spinal cord injury

At Dick White Referrals, cases of severe spinal trauma, including spinal fractures, are seen and treated successfully on a regular basis. These patients are some of the most critically ill patients referred to our clinic, with many having concurrent severe injuries. Because the time from trauma to treatment is a key recovery factor, our neurosurgery specialists are available 24 hours a day.

Brain surgery

Brain surgery is performed regularly in those cases where it is necessary, for example congenital hydrocephalus, syringohydromyelia, Chiari type 1 malformation, brain cysts, traumatic brain injury, brain haemorrhage or brain tumours. Because of the close and strong collaboration which exists between the neurology and the anaesthesia/critical care teams, state-of-the-art perioperative management ensures that our success rate is maximised.



Neuro-oncology

Neuro-oncological surgery is performed routinely and successfully at Dick White Referrals in cases of brain, spinal cord, meningeal, peripheral nerve and spinal tumours. The aim is not only to achieve debulking but, whenever possible, to be curative. Treatment of nervous system neoplasia includes systemic, topical and intrathecal chemotherapy and associated radiation therapy as necessary. We are undertaking a collaborative project with the University of Nottingham and the Human Genome Damage and Stability Centre of the University of Sussex to develop biological markers to facilitate an *in vivo* non-invasive diagnosis of brain tumours in dogs as a first step towards further development of human markers.

Neurosurgical intensive care

Many of our medical and surgical patients can be difficult to manage and require neurosurgical intensive care to optimise the chances of a good outcome. This is particularly true after brain and cervical spinal surgery

and in cases of severe neurological diseases such as botulism, tetanus, myasthenia gravis and severe neurotoxicological syndromes. Critical neurological patients need a multidisciplinary approach, and this is standard at Dick White Referrals. The combination of expertise which is second to none, intensive care facilities including a paediatric ventilator and purpose built wards provides the best possible environment for the care of these vulnerable patients.

Rehabilitation and physiotherapy

Physiotherapy, a science-based profession, is aimed at restoring, maintaining and promoting the optimal physical function of each individual animal. Our qualified veterinary physiotherapist uses a range of treatment modalities including manipulation and massage, electrophysical and hydrotherapies. She will also advise on post surgical handling and exercise. The spectrum of conditions for which physiotherapy

can be beneficial includes: acute and chronic pain, respiratory complications, tissue healing, soft tissue contractures, muscle atrophy and myopathies, spinal disorders and neuropathies. All of our patients benefit from the highest possible level of care by our dedicated team of specialist neurology nurses. All post operative care is provided in our state-of-the-art, climate controlled neurological ward.

Education

The Neurology Service at Dick White Referrals is fully committed to the provision of continuing professional education, including a recognised ECVN Residency Programme in Neurology and Neurosurgery. We also support undergraduate teaching of neurological science at the School of Veterinary Medicine and Science, Nottingham University, and we play an active role in the Masters Course in Veterinary Physiotherapy run by the National Association of Veterinary Physiotherapy.