

### **Evolution of Neurosurgery**

The decade of 1940s started with a world at war. Many of the advances in the field of neurosurgery was directly related to the treatment of wartime head and spinal injury casualties.

Neurosurgery is a rapidly evolving surgical subspeciality and has often taken a lead in adopting new technologies. Advancing technology however is not the only force driving change in this discipline. Other factors include an escalation in patient expectations, an increasing (and ageing) population and the prevailing economic condition.

Neurosurgical practice has clearly evolved over the last decade, changes include a trend towards coiling rather than clipping of cerebral aneurysms, an increasing number of tumour resections (particularly for malignant glioma) coupled with the increased use of image guidance and endoscopy.

In spinal neurosurgery, instrumentation is currently increasingly favoured.

The most important changes have occurred in the fields of neuro-oncology, vascular neurosurgery and spinal surgery. Inter-specialty collaboration is establishing itself as a model of care.

Although neurosurgery may be one of the younger surgical specialities, having Sir Victor Horsley and Harvey Cushing among its most celebrated fathers, it may also be the most rapidly changing.

Cooling and embolization is gaining popularity for vascular lesions of brain and endoscopic ventriculostomy for hydrocephalus

Microvascular decompression of Vth and VIIth CN is also gaining popularity because of excellent results.

Cranioplasty in for postoperative and post traumatic cranial vault defects have also been on increase.

Microsurgical techniques and non invasive imaging procedures with advancement of neuroanaesthesia, intensive care and image guided surgery have changed and widened the scope of neurosurgical practice.