

# Advances in Neurointensive Care

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## Abstract

**Purpose:** To highlight recent advances in neurological and neurosurgical intensive care. **Data Sources:** A MEDLINE search was conducted from January 1980 to August 2000. Keywords included intensive care, head injury, subarachnoid haemorrhage, status epilepticus, myasthenic crisis, Guillain-Barre syndrome and stroke. All articles in English were considered for review. Additional articles were identified from the references of the retrieved articles and cross-referencing selected articles. **Data Extraction:** All clinical studies, review articles and abstracts were reviewed. **Data Synthesis:** Rapid advances in neurological and neurosurgical intensive care in the last decade have led to the development of specialised neurointensive care units with joint ventures between neurology and neurosurgery. Work in these units have contributed immensely to our understanding of the pathophysiology and management of acute brain injury. The principles of intensive care management include amelioration or reversal of brain injury and preservation of normal neural tissue. Treatment algorithms are possible with the aid of intense clinical and neurophysiologic monitoring. Ongoing clinical and basic science research may provide new treatment options for the intensivist in the acute phase of brain injury. **Conclusion:** Specialised neurointensive care units provide the best environment for the patient with acute brain injury. Outcome is frequently enhanced with clinicians skilled towards dealing with the whole spectrum of neurologic insults.

*Ann Acad Med Singapore 2001; 30:300-9*

**Key words:** Guillain-Barre syndrome, Head injury, Intracerebral haemorrhage, Ischaemic stroke, Myasthenic crisis, Status epilepticus, Subarachnoid haemorrhage

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