

# Insights on Neuro Intensive Care

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## INTRODUCTION

From the principles of respiratory care developed during the poliomyelitis epidemics, neurological intensive care has grown into a wide area encompassing both acute and severe aspects of neurological disease. A neuro-ICU is a form of intensive care unit dedicated to the treatment of patients with life-threatening neurological conditions. Neuro-ICUs were created about 25 years ago in response to a growing demand for more advanced expertise in the increasingly sophisticated techniques for recognising and treating neurological disorders. A neuro-ICU is a form of intensive care unit dedicated to the treatment of patients with life-threatening neurological conditions. Neuro-ICUs were created about 25 years ago in response to a growing demand for more advanced expertise in the increasingly sophisticated techniques for recognising and treating neurological disorders. In the acute and perioperative treatment of cerebrovascular disease, the neurological intensive care unit plays a critical role. The cornerstone of neurocritical treatment understands how to use intracranial pressure (ICP) control and how to apply the necessary intervention for ICP elevation to ensure sufficient cerebral perfusion. Preventing secondary brain injury requires careful control of the interplay between cerebral and systemic physiology, especially in disorders of cerebral autoregulation. Finally, knowing the pathophysiology of the damaged brain in acute stroke, subarachnoid haemorrhage, and arterial stenosis will help direct the best use of interventional endovascular procedures in these conditions [1].

Fever is common in the neurocritical care unit and is linked to worse outcomes in patients with serious neurologic illness. Although it is widely known that fever is linked to worse outcomes in this patient group, it is unclear if intense temperature control can help. In this high-risk population, temperature should be controlled on a regular basis, fever should be worked up correctly to determine the infectious aetiology, and practical steps should be taken to regulate the elevated temperature. Though infection is a common cause of fever in patients with severe neurologic illness, the underlying brain injury can worsen the fever. The clinician must determine when to start

fever control steps, how vigorously to treat the fever, and what temperature to aim for in order to achieve normothermia. As first-line treatment, a variety of pharmacological agents are available. Advanced temperature-control equipment should be applied to pharmacological interventions depending on the degree and magnitude of the febrile reaction. There are invasive (intravascular catheters) and noninvasive (external cooling pads) temperature-control devices available. To reduce the amount of time spent in a febrile condition and to relieve the secondary brain damage caused by fever, the clinician can use both pharmacologic and device-based temperature therapies [2].

The essence of neuro-ICUs is that they are very multi-disciplinary. Neurologists, neurosurgeons, intensive care physicians, and anesthesiologists often collaborate with teams of highly skilled nurses, respiratory therapists, nutritionists, and other professionals. The advantage of having so many specialists is that each patient receives a wide range of expertise. The disadvantage is that unless friends and families pay careful attention to who is speaking, it is possible for them to become confused about who they're talking to and why. This potential for misunderstanding is exacerbated by the fact that hospital employees must work in shifts, so who you speak with would possibly depend on the time of day. To avoid misunderstandings, make sure that everyone who enters the room introduces themselves and explains their position [3]. Neuro-ICUs have been linked to lower mortality and shorter hospital stays for conditions like stroke, cerebral haemorrhage, and traumatic brain injury as compared to general intensive care units. Intensive care units in general can be terrifying and perplexing, but a neuro-ICU can be a lifesaver if proper contact is maintained.

## REFERENCES

1. Ropper AH. Neurological intensive care. *Ann Neurol.* 1992;32(4):564-569.
2. Lopez GA. Temperature management in the neurointensive care unit. *Curr Treat Options Neurol.* 2016;18(3):1-9.
3. Pressman P. Overview of the Neuro-ICU

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