

027 ICNARC STUDY OF MORTALITY IN NEUROLOGICAL PATIENTS ON ICU

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In many countries, treatment of life-threatening neurological conditions takes place in specialised Neuro-Critical Care Units (NCCU). In the UK most patients are treated on general intensive care units (GICU) with varying levels neurological support.

We used the Intensive Care National Audit and Research Centre (ICNARC) database to analyse mortality for ICH, MG and GBS between 1996 and 2009 in NCCU and ICUs in the UK.

For ICH (n=10,313), overall ICU mortality was 42.4% and acute hospital mortality 62.1%. In NCCU length of stay was longer, but mortality lower, and over time, mortality from ICH

decreased faster. For MG (n=1,064) and GBS (n=1,906) there was no association between acute hospital mortality unit type—overall mortality was relatively high (MG: 8.7% ICU mortality and 22% acute hospital mortality; GBS: 7.7 and 16.7% respectively). Overall mortality did not decrease over time.

The first large-scale analysis of outcome in acute neurological disease in UK shows specialised NCCU care alone is associated with increased survival in conditions requiring highly specialised intensive care techniques. The high mortality seen after ICU discharge particularly in MG and GBS suggests that high quality step-down care and neurorehabilitation is pivotal in others.