

Post-Haemorrhagic Ventricular Dilatation in the Preterm Infant: A Survey of Clinical Practice in Australia and New Zealand

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Background: To describe unit-specific clinical practices for post-haemorrhagic ventricular dilatation (PHVD) management in preterm infants within Australian and New Zealand.

Method: Observational study using an online survey of 31 tertiary neonatal units reporting to the Australian and New Zealand Neonatal Network, conducted between December 2024 and July 2025.

Results: Twenty-nine respondents (94%). Nineteen units (66%) did not have a guideline. Majority of units (n=20/29; 69%) performed cranial ultrasonography weekly for the surveillance of PHVD following a diagnosis of intraventricular haemorrhage. Most units used a combination of radiological and clinical signs to diagnose PHVD (n=22/29; 76%) and to guide initiation of intervention (n=20/29; 69%). Majority of units (n=18/29; 62%) used lumbar puncture as the first method of intervention, followed by a ventricular access device (VAD) as the next method. Two units used ventricular taps. Marked variations between units with regard to an infant's minimum weight sufficient to insert a VAD (between 600 and 1500 g) and criteria for permanent shunting. Most units (n=24/29; 83%) consulted a neurosurgeon following a diagnosis of PHVD (n=17) or before initiating any intervention (n=7). Almost all units (28/29; 96%) supported the development of an Australian and New Zealand consensus guideline for PHVD management.

Conclusions: Marked variations for PHVD management practices in preterm infants were observed between tertiary neonatal units in Australia and New Zealand. Efforts are underway to develop a binational consensus statement to align clinical practices with current international evidence-based and consensus expert recommendations for PHVD in preterm infants.

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