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Point of Care Ultrasound (POCUS) in the NICU

References

Broadhouse KM, Price AN, Durighel G, Cox DJ, Finnemore AE, et al. Assessment of PDA shunt and systemic blood flow in newborns using cardiac MRI. NMR Biomed. 2013 Sep;26(9):1135-41. doi: 10.1002/nbm.2927. Epub 2013 Feb 15. PMID: 23412748.

Diemer A. Central venous silastic catheters in newborns: localization by sonography and radiology. Pediatr Radiol. 1987;17(1):15-7. doi: 10.1007/BF02386588. PMID: 3822578.

Ficial B, Finnemore AE, Cox DJ, Broadhouse KM, Price AN, et al. Validation study of the accuracy of echocardiographic measurements of systemic blood flow volume in newborn infants. J Am Soc Echocardiogr. 2013 Dec;26(12):1365-71. doi: 10.1016/j.echo.2013.08.019. Epub 2013 Sep 26. PMID: 24075229; PMCID: PMC3852205.

Ficial B, Bonafiglia E, Padovani EM, Prioli MA, Finnemore AE, et al. A modified echocardiographic approach improves reliability of superior vena caval flow quantification. Arch Dis Child Fetal Neonatal Ed. 2017 Jan;102(1):F7-F11. doi: 10.1136/archdischild-2015-309523. Epub 2016 May 26. PMID: 27231267.

Katheria AC, Fleming SE, Kim JH. A randomized controlled trial of ultrasound-guided peripherally inserted central catheters compared with standard radiograph in neonates. J Perinatol. 2013 Oct;33(10):791-4. doi: 10.1038/jp.2013.58. Epub 2013 Jun 13. PMID: 23765173.

Kishigami M, Shimokaze T, Enomoto M, Shibasaki J, Toyoshima K. Ultrasound-Guided Umbilical Venous Catheter Insertion With Alignment of the Umbilical Vein and Ductus Venosus. J Ultrasound Med. 2020 Feb;39(2):379-383. doi: 10.1002/jum.15106. Epub 2019 Aug 9. PMID: 31400014.

Kluckow M, Evans N. Superior vena cava flow in newborn infants: a novel marker of systemic blood flow. Arch Dis Child Fetal Neonatal Ed. 2000 May;82(3):F182-7. doi: 10.1136/fn.82.3.f182. PMID: 10794783; PMCID: PMC1721083.

Kozyak BW, Fraga MV, Juliano CE, Bhombal S, Munson DA, et al. Real-Time Ultrasound Guidance for Umbilical Venous Cannulation in Neonates With Congenital Heart Disease. Pediatr Crit Care Med. 2022 May 1;23(5):e257-e266. doi: 10.1097/PCC.0000000000002919. Epub 2022 Mar 7. PMID: 35250003.

Kuschel CA, Bach KP, Webster NJ, Page B, Groves AM, Battin MR. The reliability of 2D and colour Doppler ultrasound in localising longline position. J Paediatr Child Health. 2008 Sep;44(9):483-7. doi: 10.1111/j.1440-1754.2008.01333.x. Epub 2008 Jun 28. PMID: 18557803.

Li TG, Nie F, Xu XY. Correlation between ductus venosus spectrum and right ventricular diastolic function in isolated single-umbilical-artery foetus and normal foetus in third trimester. World J Clin Cases. 2020 Dec 6;8(23):5866-5875. doi: 10.12998/wjcc.v8.i23.5866. PMID: 33344585; PMCID: PMC7723705.

Singh Y, Tissot C, Fraga MV, Yousef N, Cortes RG, et al. International evidence-based guidelines on Point of Care Ultrasound (POCUS) for critically ill neonates and children issued by the POCUS Working Group of the European Society of Paediatric and Neonatal Intensive Care (ESPNIC). Crit Care. 2020 Feb 24;24(1):65. doi: 10.1186/s13054-020-2787-9. PMID: 32093763; PMCID: PMC7041196.