Ultrasound-Assisted Lumbar Puncture for Obese Pediatric Oncology Patients: A Feasibility Study

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Abstract

Lumbar punctures (LPs) are performed frequently on children with leukemia and lymphoma as part of the standard of care. They are typically performed by pediatric oncology providers for both diagnostic and therapeutic interventions with the aid of moderate or deep sedation. Point-of-Care Ultrasound (POCUS) has emerged as a promising strategy to aid in lumbar puncture procedures and has been found to be associated with lower number of attempts, and higher success rates. We describe our experience using POCUS to assist with LPs in a subgroup of pediatric oncology patients identified to be procedurally difficult secondary to obesity. This collaboration was well received and resulted in successful LPs in most (8/9) cases. This is a promising modality to improve the delivery of care and LP success in pediatric oncology patients.

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Abbreviations:

LP Lumbar puncture

POCUS Point-of-Care Ultrasound

CNS Central Nervous System

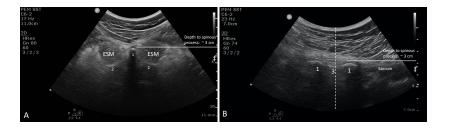
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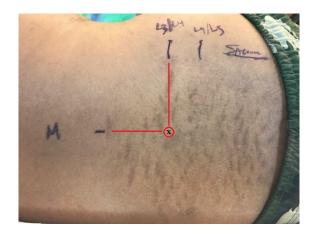
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