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Lumbar Punctures: Re-Audit of Procedure Documentation Following the Introduction of a Standardised Procedure Checklist

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Abstract : Aims: Lumbar punctures are a common bedside procedure performed in acute medicine. Published guidance exists on the standardised documentation of invasive procedures in order to reduce the risk of complications. The audit aim was to assess current standards of documentation in accordance with both the GMC and the National Standards for Invasive Procedures guidelines. A second cycle was conducted after introducing a standardised sticker created using current guidelines. This would assess whether the sticker improved documentation, aiming for 100% standard in each step of the procedure. Methods: An initial prospective audit of current practice was conducted over a 3-month period. Patients were identified by their presenting complaints and by colleagues assessing acute medical patients. Initial findings were presented locally, and a further prospective audit was conducted following the implementation of a standardised sticker. Results: 19 lumbar punctures were included in the first cycle and 13 procedures in the second. Pre-procedure documentation was collected for each cycle, whereby documentation of 'Indication' improved from 5.3% to 84.6%, 'Consent' from 84.2% to 100%, 'Coagulopathy' from 0% to 61.5%, 'Drug Chart checked' from 0% to 100%, 'Position of patient' from 26.3% to 100% and use of 'Aseptic Technique' from 83.3% to 100% from the first to the second cycle respectively. 'Level of Doctor' and 'Supervision' decreased from 53% to 31% and 53% to 46%, respectively, in the second cycle. Documentation of the procedure itself also demonstrated improvements, with 'Level of Insertion' 15.8% to 100%, 'Name of Antiseptic Used' 11.1% to 69.2%, 'Local Anaesthetic Used' 26.3% to 53.8%, 'Needle Gauge' 42.1% to 76.9%, 'Number of Attempts' 78.9% to 100% and 'Traumatic/Atraumatic' procedure 26.3% to 92.3%, respectively. A similar number of opening pressures were documented in each cycle at 57.9% and 53.8%, respectively, but its documentation was deemed 'Not Applicable' in a higher number of patients in the second cycle. Post-procedure documentation improved, with 'Number of Samples obtained' increasing from 52.6% to 92.3% and documentation of 'Immediate Complications' increasing from 78.9% to 100%. 'Dressing Applied' was poorly documented in the first cycle at 16.7%. This was not included on the standardised sticker, resulting in 0% documentation in the second cycle. Documentation of Clinicians' Name and Bleep reduced from 63.2% to 15.4%, but when the name only was analysed, this increased to 84.6%. Conclusions: Standardised stickers for lumbar punctures do improve documentation and hence should result in improved patient safety. There is still room for improvement to reach 100% standard in each area, especially with respect to the clinician's name and contact details being documented. Final adjustments will be made to the sticker before being included in a lumbar puncture kit, which will be made readily available in the acute medical wards. Future audits could be extended to include other common bedside procedures performed in acute medicine to ensure documentation of all these procedures reaches 100% standard.

Keywords : invasive procedure, lumbar puncture, medical record keeping, procedure checklist, procedure documentation, standardised documentation
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