

Validating an Assessment Tool for Paracentesis in Residency Training

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Introduction: Internal Medicine residents must learn and demonstrate procedural competence in paracentesis during their training. While direct observation and feedback are essential to the development of procedural skills, assessment tools are often impractical for the busy clinical environment. Using the Modified Delphi Methodology, we previously created a paracentesis assessment tool from expert consensus. The purpose of this current study is to determine the internal consistency of our tool as a step towards validating it for use.

Methods: Three residents with various levels of training were filmed performing a therapeutic paracentesis in the outpatient setting. The videos were edited to remove any identifying characteristics of the patients and participants. Videos were distributed to senior residents, fellows, and staff physicians, who assessed each resident using the paracentesis assessment tool. Assessment scores will be analyzed using Cronbach's alpha to determine the internal consistency and inter-rater reliability of our tool.

Conclusion: This study is an important step towards validating our paracentesis assessment tool. Although there are existing assessment tools for paracentesis, our study introduces a validation method that mimics the real world clinical setting. Using pre-recorded videos, we can establish the internal consistency and inter-rater reliability of our tool among senior residents, fellows, and staff physicians. Furthermore, this study will provide insight into the assessment styles of users from different levels of training and help inform the future design of procedural assessment tools.