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CORR Insights[®]: Assessing Shoulder Motion in Children: Age Limitations to Mallet and ABC Loops

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Where Are We Now?

Assessing upper extremity function and shoulder ROM in young patients can be difficult. A pediatric patient's inability to comprehend instructions, coupled with the anxiety of dealing with doctors and nurses can prevent an accurate assessment. The Mallet scale is one of the few evaluation tools available to the clinician. However, we still do not know whether this evaluation tool performs in young children while accurately reflecting shoulder function. The paper by Pearl and colleagues presents a new evaluation scale, and compares it to the Mallet scale in normal children without any shoulder problems. Importantly, both scales are evaluated with regard to age performance.

This CORR Insights[®] is a commentary on the article "Assessing Shoulder Motion in Children: Age Limitations to Mallet and ABC Loops" by Pearl and colleagues available at:

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Where Do We Need To Go?

The paper by Pearl and colleagues reveals that children 3 years of age or younger have difficulty with any active motion evaluation. The ABC Loops protocol provides excellent reliability in evaluating active shoulder motion in three important functional planes for children 3 years of age or older. These motion planes are natural movements and require all the components of normal shoulder motion. With relatively normal movement tasks, the clinician can assess the components of shoulder motion and function. This will provide the clinician another method of assessing active shoulder function evaluation in a population that can be difficult to examine. These tools do not evaluate passive motion, or joint contractures, and there remains an unmet need for tools that help us assess patients younger than 3 years of age, as neither of these scales are effective in that population.

How Do We Get There?

The next step is to utilize the Mallet and ABC Loops scales for young patients with shoulder disability, affording us the opportunity to obtain data on these evaluation tools in patients with specific shoulder conditions. Pearl and colleagues have begun this process; once complete, we will be able to determine the utility of the measurement tools in clinical scenarios. This will help in evaluating these difficult patients and their responses to treatment.

