Keeping pitchers in the game: Potential in osteopathic medicine to prevent shoulder injury

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The Spencer technique, in which a clinician guides the shoulder joint through its full range of motion (ROM), may prevent injury in baseball pitchers, according to research in the *Journal of the American Osteopathic Association*.

Researchers evaluated the effects of the Spencer technique on pitchers from Seton Hill University's men's baseball team. They found a single administration of the technique immediately restored internal rotation of the players' shoulder back toward baseline.

"We know repeated overhead throwing alters range of motion in the shoulder, which can hinder performance and increase susceptibility to injury," said Amber Eade, PhD, lead researcher on this study. "Physical therapists and trainers have been using the Spencer technique to address this problem; however, there has been no research to support that approach until now."

The researchers measured players' ROM to establish a baseline, then came back a week later to measure again. In that short window, a significant 14 percent reduction of internal rotation in the shoulder joint had already occurred as a result of training. Researchers then administered the Spencer technique and reevaluated, finding the players' internal rotation was restored 85 percent back toward the first week's measurements.
"Considering that study participants were college-level players and the vast majority had been pitching several years, it was surprising to see the effects a week of playing had on their range of motion," said Stacey England, DO, the osteopathic physician overseeing the study. "Osteopathic medicine is focused on prevention, so it was equally encouraging to see the effect of the Spencer technique. This is a great first step in determining the full potential of this technique for baseball players and whether more frequent administration can reduce rates of shoulder injury in follow-up studies."

In the meantime, the researchers encourage team physicians, trainers and physical therapists to consider the possible benefits of the Spencer technique for their players.


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