Core Muscle Injury Repair: Does Sex Impact Outcomes? A Systematic Review

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Introduction. Core muscle injuries have had significant development and literature supporting identification and treatment for the specific injury, and they are becoming more specific and detectable with imaging and physical testing. Identifying whether there are sex-based outcomes will help with patient specific care and better outcomes.

Methods. The authors of this study conducted a systematic review using five databases with certain inclusion and exclusion criteria which included a PRISMA flow sheet. The five databases provided the most comprehensive review for the literature search. Every result was reviewed for surgery type, sex-based outcomes, and selected based on the inclusion/exclusion criteria.

Results. In total, there were seven studies that met inclusion and exclusion criteria and were included in analysis. Five of these studies included patient populations of all males while one provided a male and female subgroup analysis, and one investigated all females. Measurements of outcome were recorded based on the studies that met criteria and included revisions, complication rates, return to play, functional tests, and pain scoring.

Conclusions. Although core muscle injuries are more common in males who are playing competitive sports, there was very little data available to compare outcomes between males and females. The limited data available suggest females may benefit less than their male counterparts from existing surgical procedures and additional investigation into this relationship is warranted.