

# Auditing the Representation of Female Athletes in Sports Medicine Research: Rotator Cuff Repair

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**Introduction.** The rotator cuff stabilizes the glenohumeral joint and enables shoulder movement. Injuries can cause weakness, pain, and restricted movement, especially in female athletes. This project reviewed rotator cuff repair and evaluated female athlete representation in current literature using a standardized protocol.

**Methods.** A systematic audit of rotator cuff repair literature following Smith et al.'s 2022 protocol was performed. Factors identified included study population, athletic caliber, menstrual status, research theme, sample size, journal IF, and Altmetric score.

**Results.** Twenty articles met the inclusion criteria. 650 rotator cuff repairs were identified with 514 (79.08%) of repairs males and 136 (20.92%) females. Most studies (15/20, 75%) were mixed cohort, while the others were three male studies (3/20, 15%), and two female studies (2/20, 10%). Out of 479 shoulders involved within the mixed-sex cohort, 353 (73.69%) were male while 126 (25.68%) were female. In the mixed-sex cohort, studies investigated sedentary populations (2/15, 13.33%), recreationally active participants (3/15, 20%), trained athletes (7/15, 46.66%), national athletes (2/15, 13.33%), and international athletes (1/15, 6.66%). Among male studies, two investigated international athletes (2/3, 66.66%) and one investigated recreationally active participants (1/3, 33.33%). One female study investigated national athletes, and the other investigated international athletes. All mixed-sex cohorts investigated health outcomes. One male study (33.33%) investigated performance outcomes within MLB players, while the other two investigated health outcomes (66.66%). The female studies only investigated health outcomes. All female studies and mixed-sex cohort studies failed to include menstruation as a variable.

**Conclusions.** Females are not adequately represented in research regarding rotator cuff repair.