

Auditing Representation of Female Athletes in Sports Medicine Research: Lateral Ankle Instability

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Background: Establishing evidence-based recommendations specific to female athletes has been neglected in research. Smith et al. notes that “female-targeted research related to sports science/sports medicine has failed to mirror the increase in participation and popularity of women’s sport.” (Smith et al., 2022). Hosea et al. identified that females had a 25% greater risk of sustaining a Grade I ankle sprain compared to males. The primary purpose of this study is to audit representation of female athletes’ literature regarding Operative Repair of Lateral Ankle Instability.

Methods: An electronic search was performed using PubMed to identify articles related to Lateral Ankle instability repair using the standardized protocol by Smith et al. to assess female representation in research. (Smith et al., 2022) Studies were assessed by population, size, athletic caliber, study impact, research theme, and menstrual status.

Results: 5146 articles were identified and 83 were included. Female representation across all studies was 38.36%. Composition of included studies was predominantly mixed sex cohorts (92.77%). Within mixed sex cohort studies, the total representation of female athletes was 40.94%. Six studies were male only constituting 260 participants while none of the studies were female only cohort. The research theme of included articles was as follows: Health) 66 (79.52%), Performance) 2 (2.41%), Indirect Association) 15 (18.07%). No study collected data related to menstrual status.

Conclusion: Mixed sex cohort studies underrepresented female athletes and male only cohort studies were more common than female only studies. The disparity may be due in part to the decreased incidence in females, however, these findings indicate a need for increased representation of female athletes in research related to Lateral Ankle instability repair. Future studies should focus on equal representation of female athletes and data collection related to sex specific hormones and menstrual status to improve recommendations and treatment of Acute/Chronic Lateral Ankle Instability for female athletes.