

Letter to the Editor

Labral Injuries of the Hip in Rowers

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To the Editor:

Boykin et al. [2] presented a review of 18 rowers (21 hips) with MRI-confirmed labral tears in the anterior half of the acetabulum treated from 2003 to 2010. The most common presentations were groin pain (15 of 21 hips) and positive anterior femoroacetabular impingement (FAI) sign (17 of 21 hips). Fifteen of 21 hips had radiographic FAI (10 pure cam lesions and five mixed cam/pincer). Mechanism of labral injury was proposed to be repeated hip hyperflexion. It was stated that rowers' hips go from extreme flexion to extension during the stroke. Among the hips that were treated with arthroscopic surgery (18 of 21), femoral head/neck osteochondroplasty was performed in six cases. Among these 18 patients, 10 returned to rowing, six did

not, and two had missing data at a mean of 8 months (range, 3 to 25 months) after surgery. The unfavorable return to sport in this series was contrasted with an epidemiologic study showing a low percentage of rowing injuries resulted in an inability to train for more than 1 month [9].

Regarding mechanism of injury, rowers' hips do not enter anatomical extension during rowing (approximately 20° of hip flexion remains in the finish position) [3, 8]. Hyperflexion implies joint flexion beyond normal limits [5]. Normal passive ROM at the hip joint is 135° flexion and 30° extension [4]. Kinematic analysis reveals that the ROM of the hip falls within normal ROM during rowing, and is not hyperflexed [3]. Therefore, it is likely that the high incidence of FAI in this series precipitated the tears and symptoms among majority of the rowers. Importantly, femoral alpha angle measurement of Magnetic Resonance Arthrography shows considerable variability, and clinical impingement tests remain the most reliable predictor of the presence of FAI [6].

With regards to the main goal of the paper — determining “the likelihood that a rower with labral injury, treated arthroscopically, will return to sport,” — is it possible that the low postoperative return rate was a consequence of performing femoral head/neck osteochondroplasty in only six of 15 hips with cam lesions, therefore, not directly addressing the joint impairment? Additionally, the three patients with bilateral hip pathology were only surgically treated unilaterally. How did the three untreated hips impact return to rowing? Furthermore, it is known that symptom duration longer than 3 years is associated with poor outcome after hip arthroscopy [1], however, no preoperative symptom duration was presented [2]. Finally, as return to rowing was assessed as early as 3 months postoperatively, what was the rehabilitation protocol? Return to sport after hip arthroscopy

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should be advanced slowly to prevent continued irritation or reinjury [7].

In the cited retrospective study regarding musculoskeletal injury present in elite-level rowers competing at the Junior World Rowing Championships, [9] the authors emphasized that study design may have resulted in under-reporting of severe rowing injury, as severely injured rowers may not have recovered to compete at the World Rowing Championships. Additionally, without presenting return to sport data in context of number of rowers who wanted to return to rowing but could not due to reoccurring symptoms, this aspect of analysis by Boykin et al. is limited in its utility [2].

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