Luxatio erecta humeri in the swimmer’s shoulder: A combination of ligamentous laxity and motion dyskinesis

Sir,

I would like to congratulate Dr. Gökkus et al. on their insightful and unique description of luxatio erecta humeri as a result of a swimming injury.[1] This is a quite rare but fascinating pathologic condition which can present physicians with a significant treatment challenge. I applaud the authors for publishing their report in a journal with open access so that all physicians who may encounter this injury can easily access the information required to effectively render treatment for these patients.
I would like to comment on two aspects of the presented article. First, I would like to point out that while the authors did a masterful job in the reduction maneuver presented, this technique is not without its risks. Indeed, serious iatrogenic complications have been described especially in the setting of inadequate sedation which has led to the investigation of alternative methods of reduction. Scapular manipulation (with or without intra-articular local anesthetic) has significant advantages in terms of avoidance of iatrogenic injury as well as the minimal need for sedation/general anesthesia. Practitioners should be aware of this technique and we have found this to be an excellent option in a wide variety of glenohumeral reductions including luxatio, especially in situations where sedation is not an option (sidelines, urgent cares, medically compromised patients, etc.).

My second comment is related to the mechanism of injury described. The swimming motion shown is accurate, but it underestimates the scapulothoracic motion that occurs with the swimming stroke. The glenoid is not stationary in any glenohumeral activity including the freestyle swimming stroke; it undergoes significant, coordinated scapulothoracic mediated motion to maintain a proper glenohumeral relationship. It is much more likely that the patient sustained a rapid axial or hyperabduction load while the arm was in a position of hyperabduction and forward flexion. This rapid load was not able to be compensated for by the scapulothoracic motion resulting in the inferior glenohumeral dislocation. One may imagine this occurring during a forward dive into the water or striking the pool wall earlier than expected while turning a lap. Unfortunately, given the communication difficulty and the lack of direct observation of the injury, any discussion of the mechanism of injury is purely conjecture.

In closing, the authors have presented an excellent report demonstrating the most up to date review of luxatio erecta humeri and its treatment. As with any rare injury, it is only through sharing of these reports that we can gain knowledge that will translate into more effective and comprehensive patient care.

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