



第38回 日本整形外科学会スポーツ医学学会学術集会  
ランチョンセミナー 1

# Biomechanical and Treatment Considerations for Shoulder and Elbow Injuries in Overhead Athletes

日時

2012年 9月14日(金)  
12:20~13:20

会場

パシフィコ横浜会議センター  
第1会場(1階メインホール)

〒220-0012 横浜市西区みなとみらい1-1-1  
TEL 045-221-2166(交通案内) 045-221-2155(総合案内)  
<http://www.pacifico.co.jp/>

座長

高岸 憲二 先生

群馬大学大学院 医学系研究科 機能運動外科学(整形外科)

演者

Russell Huffman 先生

University of Pennsylvania Health System

【認定単位】

日本整形外科学会教育研修会専門医資格継続単位(N)

02. 外傷性疾患(スポーツ障害を含む) 09. 肩甲帯・肩・肘関節疾患

日本整形外科学会教育研修会スポーツ医資格継続単位(S)

共催 第38回 日本整形外科学会スポーツ医学学会学術集会  
三笠製薬株式会社

**G. Russell Huffman, M.D., MPH**  
*Assistant Professor of Orthopaedic Surgery*  
*Shoulder and Elbow Service*  
*Director, Shoulder and Elbow Fellowship Program*



JOSSM 2012 Meeting - Abstract

*Biomechanical and Treatment Considerations for Shoulder and Elbow Injuries  
in Overhead Athletes*

Shoulder and elbow injury is common in overhead athletes, limits athlete performance and often prevents a return to sport. Successful recovery from these injuries depends upon the surgeon's clear understanding of shoulder and elbow biomechanics, a precise history and physical examination, and the surgeon's knowledge of the surgical anatomy and principles. We have observed that the biomechanical cause of glenoid labrum tears may be multifactorial and best explained by a combination of the peel back mechanism, theory of internal impingement, and biceps brachii forces. Anatomic variance and the kinetic chain also play an important role in injury and prevention. We have observed that the diagnosis of both shoulder and elbow pathology in overhead athletes is highly dependent upon the athlete's history, physical examination and dynamic imaging. While magnetic resonance imaging (MRI) and arthrography (MRA) are specific in detailing injury, these images are often not sensitive enough to detect injury in many athletes. Therefore, the surgeon's treatment should rest on the athlete's history and examination.

Successful treatment of glenoid labrum pathology depends upon use of the proper anchor material, anchor size and anchor placement. Treatment of ulnar collateral ligament injuries requires a reproducibly strong graft, reliable graft fixation, and anatomic graft placement. Restoration of shoulder kinematics and of the kinetic chain is essential to ensure full recovery and subsequent injury prevention for both shoulder and elbow injuries. The current principles of surgical treatment of labrum tears and ulnar collateral ligament injuries using an evidenced based approach will be presented.