Purpose.

Methods.– To determine the risk of recurrence during the return to sport after surgery for anterior shoulder instability.

Results. – The authors followed by telephone 117 athletes who benefited from surgery between 2005 and 2011: Latarjet (79 patients) or Bankart (38 patients). All are competitors, minimum regional level and responded to the questionnaire after surgery: 26 months means (11 to 55 months) for group “Latarjet” and 28 months (14 to 45 months) for group “Bankart”. The WOSI did not correlate with the mobility item of the Walch-Duplay questionnaire after surgery: 26 months means (11 to 55 months) for group “Bankart” and 28 months (14 to 45 months) for group “Latarjet”. The return to competition is also higher for this group (91%–79%, P = 0.0045), training difference (2.5–20.5%, P = 0.01).

Conclusion.– The athletes with Latarjet surgery may return to sport more quickly with less risk of recurrence than with Bankart. Although the results are in favor of Latarjet, the choice of the technique must be left to the discretion of the surgeon, but the type and level of sports could be a reason for the choice of surgical techniques.

Discussion.– The WOSI was found to correlate with the Walch-Duplay score. However, the WOSI was more sensitive than the Walch-Duplay score for the assessment of patient satisfaction. It is likely that both self-administered questionnaires and physical examinations are complementary for an accurate investigation of the functional objective and subjective outcome after shoulder stabilization surgery.

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Objectives.– Carry out a survey on the resuming of sport or work.

Method.– Through GREP, 220 questionnaires making a retrospective assessment of the time taken to go back to sport after cuff surgery were sent to patients aged under 60, and 23 questionnaires were sent to senior surgeons with 5 questions on their post-operative practices.

Outcome.– Ninety-six in 220 questionnaires were usable (55 male, average age 52.77). Eighty percent took regular exercise before the operation, with 59% using their upper limbs. 87% resumed a sport (52% of whom a racket sport or a contact sport) on average 8.7 months after the operation. A biceps tenotomy-tendonitis was the only factor with a positive influence on the resuming of sport.

The surgeons answered that they allowed going back to potentially traumatic or contact activities after 7.9 months on average. Only 31.8% prescribed muscle gain prior to sport.

Conclusion.– These figures about resuming sports involving the use of the upper limbs are below those of competitive throwing sports [1]. Surgeons have little inclination to prescribe muscle gain before resuming a sporting activity. Several studies show that retrieving full muscle strength is not done until one year after surgery [2]. Faced with growing calls for reinforcement of physical activities from patients over 50, the interest of a functional recovery of the operated cuff on the ability to resume sport needs assessing.

Keywords: Shoulder stability; Latarjet; Bankart; Recurrence; Sport

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Conclusion.– In this study, it is not highlighted that an isokinetic profile may be associated with a history of injury of the shoulder despite a trend toward lower ratio in subjects with a history of injury to the shoulder. A prospective study is under progress.

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Teres major and latissimus dorsi myotendinous injury in a professional boxer

E. Martin *a, G. Lotito *a, J.M. Viton *a, A. Delarque *a, L. Bensoussan *a, J.M. Couldreuse b, T. Lecoroller c

*Pôle médecine physique et réadaptation, CHU Timone, 23, rue du Capitaine-Galinat, 13005 Marseille, France
b Service médecine du sport, CHU Sainte-Marguerite, France
c CHU Sainte-Marguerite, France
*Corresponding author.
E-mail address: elisamartin@hotmail.fr.

Keywords: Shoulder injury; Teres major; Boxing injury

Introduction.– Shoulder injuries are common sports pathologies. We describe the diagnosis and management of a rare injury: a teres major tendon tear.

Case report.– A 28-year-old man who was a professional boxer, was admitted for left axillary pain after an uppercut. On examination, he had no apparent abnormalities but had painful limitation of active range of motion (ROM) without limitation of passive ROM. There were no signs of neurovascular deficit, rotator cuff injuries or gleno-humeral instability. During manual strength testing, isometric teres major and latissimus dorsi contractions were painful. Ultrasound and MRI showed teres major and latissimus dorsi tear at the myotendinous junction. He was treated conservatively with rehabilitation (specific and global muscular strengthening). He returned to competition 4 weeks later.

Discussion.– There are only few (21) reported cases of teres major tears, and most occurred in competitive athletes. None had been reported on boxers. These injuries are underdiagnosed as the functional deficit is of minimal consequence in daily life but may be unacceptable in an athlete. The low prevalence of these tears may be explained by the lack of visualization on conventional shoulder MRI due to the narrow field of view. We thus insist on the need for a thorough clinical examination followed by echography and MRI with adapted windows. Our case shows conservative treatment was successful, with good outcomes and return to the competition level.

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Shoulder muscle strength is correlated with volleyball smash velocity

F. Degache *a*, G. Minchev *a*, M. Genty b, P. Edouard c

*a Institute of Sports Sciences, Department of Physiology, University of Lausanne, 1015 Lausanne, Switzerland
b Thermal Center, Yverdon les Bains, Switzerland
c Laboratory of Exercise Physiology, University Jean Monnet, Saint Etienne, France
*Corresponding author.
E-mail address: francis.degache@unil.ch.

Keywords: Isokinetics; Shoulder; Motion analysis; Sports

Introduction.– Smash effectiveness represents a determining element in volleyball. To compete at a high level, the player must, in particular, produce a spike characterized by a high ball velocity at an optimal angle between upper arm and trunk.

Some muscular features could influence ball velocity during the volleyball smash.

Methods.– A prospective study of 11 women volleyball players from the Switzerland national divisions (League B) and 7 women who practice in recreational volleyball (control group) underwent an isokinetic assessment of the dominant shoulder. Ball velocity performance (radar gun) and angle of smash (video analysis-Dartfish system) during a smash test were measured. We tested the relationship (Pearson correlation test) between the isokinetic parameters field performances represented by ball velocity. We also compared control group and League B player data by student-t test.

Results.– Ball velocity correlated significantly with strength performance of the dominant shoulder (internal and external rotators) in the concentric mode at 60°s for internal rotators ($R = 0.6, P = 0.04$) and external rotators ($R = 0.7, P = 0.01$) in League B group. Negative correlation was established with the eccentric external rotator at 30°s and ball velocity ($R = -0.8, P = 0.02$) for control group. League B players differed from control players by higher ball velocity ($P < 0.05$) and muscle shoulder strength for all angular speed, and by lower angle smash ($P < 0.05$).

Conclusion.– Some specific strength correlated significantly with spike performance in high-level volleyball practice. Our results could provide useful information for training management and propose some reflections on injury prevention.

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