

Advances in preventing shoulder sports injuries

Forthomme B, Crielaard JM, Croisier JL.

Department of Motor Sciences, University and CHU of Liege, Belgium

Verhagen et al. [1] found that shoulder injury caused the longest mean absence from sports participation (6.2 ± 9 weeks) in volleyball players. In baseball, acute shoulder injuries were twice as likely during games than during practices yet two third of preseason injuries were non contact in mechanism, suggesting overuse injuries [2]. Except for the suprascapular neuropathy, the real etiology of shoulder pain among overhead athlete remains relatively unknown. The proposed risk factors for shoulder pain among volleyball athletes have been classified as intrinsic (anatomy, biomechanics, glenohumeral internal rotation deficit, muscle strength imbalances, core stability, previous injury, scapular dyskinesis and gender) and extrinsic (training errors, level of competition, load and fatigue) [3]. Some of those factors should be modifiable by rehabilitation, alteration of the throwing technique or load of training reduction during preseason and season [4].

Injury prevention should be a primary goal of every medical staff, athletic trainer and coach. Van Mechelen et al. [5] proposed the following sequence sports injuries prevention: (1) to establish the incidence and severity of the injury problem, (2) to identify the risk factors and mechanisms of injuries, (3) to introduce a preventive program and, (4) to assess the effectiveness and cost effectiveness of the preventive action by repeating the first step.

To our knowledge, no specific studies on prevention have been published to give evidence based guidelines for implementing intervention on shoulder pain. To be efficient, a preventive approach should require consistent information to players and trainers and a supervision process during the preventive training. Obviously, the athlete's compliance should also be evaluated.

References

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