

THE RIGHT MANAGEMENT OF CONCUSSION

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Football does not belong to the high risk sports of sports related head injuries, but they require a special attention due to the risk of a potentially serious injury. In international football championships (1998 to 2012) on average, 1% to 5% of all injuries or every 7th head injury was diagnosed as concussion (the mildest form of traumatic brain injury). The incidence of concussion appears twice as high in women than in men`s football. Most head injuries have been reported during match play. The signs and symptoms of a concussion are heterogeneous and not always specific for a concussion. Confusion, memory impairment and balance disorders with or without loss of consciousness have been reported as the key signs.

The course of a concussion is positive. In up to 85% symptoms resolve within 7 to 10 days. However, the discussed short and long term consequences require adequate diagnostic and therapeutic management strategies for both gender and at all ages and competitive levels. The inability to immediately estimate injury-severity on pitch/at sideline, and define the adequate time for a safe return to training and match play have been reported as one of the biggest challenges for the team physician or other medical professionals of the teams.

In the last 20 years, different research groups have developed guidelines and recommendations for dealing with sports concussion. The most popular and largest group is the Concussion in Sports Group, who is also editor of the Sport Concussion Assessment Tool (SCAT3), Pocket Concussion Recognition Tool (PCRT) and Child-SCAT in its 3rd editions. Advanced assessments focus on a comprehensive multimodal approach, which e.g. includes (apart from the vestibulo-spinal part) vestibular and ocular motor components of the vestibular system. The differentiation is justified due to different therapeutic management strategies and thus has relevant influence on recovery time and Return to Play (RTP). While e.g. according to the RTP-guidelines some rest is required after a concussion, an immediate return to training, that includes a specific vestibular therapy to induce compensational mechanisms, is recommended in cases of impairment of the vestibular system.

All guidelines agree that in case of a suspected or diagnosed concussion after a traumatic head impact, management and return to training and match-decision should be taken after clinical judgement on an individualised base according to the current international guidelines. If a concussion is suspected, the player should not be permitted to RTP on the day of injury. The RTP programme should follow a gradual step-wise procedure. A concussed player should not RTP unless he/she is asymptomatic (of initial symptoms) and the neurological and neuropsychological examinations are normal or according to pre-seasonal baseline results (if existing). Untimely RTP includes an increased risk of sustaining another more severe brain or another injury and recurring brain injury of long-term sequelae.

The management of concussion in football should primarily follow the recommendations proposed by the Concussion in Sports Group. Distribution of information and instruction of players and their medical and coaching team help to protect the players` health.