

THE IMPORTANCE OF HEAD POSITION IN TACKLE INJURY PREVENTION IN RUGBY UNION

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Introduction

Rugby has a high rate of head injuries caused by tackling. In the case of the tackler, injury can occur during the contact phase when his head makes contact with the ball-carrier before his shoulder, this happens because the tackler is in a head-down position (neck flexion) and has averted his eyes from the target. This study investigated the importance of head position in preventing severe head injuries caused by tackling.

Methods

8 Japanese rugby union players (age: 21.0 ± 6.7 years). Participants kept the front-tackle posture for 3seconds. Tackling force (TF) was measured from both shoulders in three different head positions;

- Maintaining a straight spine (Chin-in position) while watching the target,
- Keeping the head down (neck flexion) with eyes averted from the target.
- Keeping the neck extension while watching the target .

The subjects also received pressure on both shoulders while maintaining tackling posture at maximum effort.

Results

Comparing these tackling positions, the TF of a straight spine (Chin-in position) was the strongest ($p < 0.05$). The head-down tackling force was the weakest of the three head positions ($p < 0.05$).

Conclusion

Our findings suggest that a tackle performed with attention to head position may help to reduce severe tackle injuries in rugby players.