

Rejoinder by authors to comments by Dr Broughton regarding the article published in the December 2004 issue of JSMS entitled 'Incidence of injury in elite junior rugby union – a prospective study' by Dr A McManus and Professor D Cross.

Thank you for your positive comments regarding our research.

We concur that tackling is the phase of play most significantly associated with injury in rugby union.¹⁻³ However, although extensive videotaped footage was collected on all injuries sustained in tackles (to both the ball carrier and the tackler) it was outside the scope of this study to analyse the footage in sufficient depth to recommend evidence-based strategies to reduce the high incidence of tackling injuries in Rugby Union. We are, however, aware of the excellent research conducted by the Injury Prevention Research Unit (IPRU) at Otago University in New Zealand. Under the guidance of Barry Wilson and Associate Professor David Chalmers, the team at IPRU continues to research tackling in rugby union in an endeavour to reduce the number and severity of injury associated with this phase of play.²⁻³

The article states that injury to the lower limb was the most common site of injury overall (43/118 injuries including the knee, ankle and leg), not the most common site of injury in tackles. Our data indicated that injury to the shoulder and trunk were the most common injury sustained in tackles (21/60 injuries sustained in tackles).

We do not agree that positional specificity has no role to play in injury prevention. Research clearly indicates that the position played had a significant bearing on the risk of injury.³⁻⁵ In our study the flanker was five times more likely to sustain an injury than the fullback. The flanker was also one of the positions most at risk of severe injury. One could conclude that the risk of severe injury to the flanker is merely a function of their likelihood of sustaining an injury, regardless of severity, if it were not for the fact that the wing, centre and half back were equally at risk of severe injury. However, their risk of sustaining an injury was much lower than the fullback. Other factors that contributed to the positional risk of injury in this study were the time of the season, the site of injury and if a back or forward. These findings are supported by other studies where the position played was associated with the risk of injury.³⁻⁷ Clearly there is a need to investigate the demands of each position and how they impact upon the risk of injury.⁷ The findings from a study of this nature could be used to inform training regimes that address the specific needs of each position, thus effectively conditioning players to meet the demands of their position, and reduce the risk of injury through inadequate preparation.

Time motion analysis is indeed an effective tool in our quest to both minimise injury and maximise performance in rugby union.^{4,7} Having recently collected and analysed almost 700 hours of videotaped footage, the lead author supports this methodology as a useful (although time intensive) means of providing the evidence needed to reduce the significant level of injury, thus allowing us to continue to enjoy the many benefits of playing sport.

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