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Concussion & Heading in Football, What Does the Evidence Say?

This document has been prepared to summarise the current evidence relating to the risks associated with heading and concussion in football.

Introduction

New Zealand Football (NZF) is committed to ensuring the safety and welfare of our players, coaches and other stakeholders.

- NZF, through the ACC Sports Collaboration Group, was an active participant in the development of the ACC Sports Concussion Guidelines.
- The ACC Sports Concussion Guidelines were developed by a panel of international experts (including Neurologists and Sport and Exercise Physicians) from both New Zealand and overseas.
- NZF are actively monitoring research relating to head injuries and concussion (as well as other injuries) and are looking for ways to reduce both the risk of injury – and the morbidity associated with injury.
- In association with the Accident Compensation Corporation NZF hosts an annual injury prevention meeting.
- New Zealand Football is represented on the FIFA Medical Committee and this medium has input into policy decisions relating to health matters in football including those relating to heading and concussion.
- New Zealand Football has a clear position statement regarding concussion that outlines our position. NZF provides concussion education workshops throughout NZ for our football communities to gain better understanding of concussion and the management of such injuries. This is managed by our Player Welfare team delivering the Fit4Football programme in each of the seven federations.

Heading vs. Concussion

We are aware of the recent rule changes in England, Scotland and Northern Ireland relating to heading in youth football. We are also aware of the research relating to the increased risk of neurological conditions in former Scottish Professional football players.² In most situations heading does not cause concussion. The most frequent causes of concussion in football are blows to the head and face following collisions with opponents (and not the ball). The concern about heading and football relates



to the possible long-term consequences of repeated contacts to the head at a 'sub-concussive' threshold. This must be distinguished from players who sustain a concussion.

It is important to recognise the following:

- A meta-analysis published in the British Journal of Sports Medicine has reviewed and critically appraised all of the available literature relating to heading and brain injury.³ The authors' conclusion, based on all available data, is that currently there is no evidence that links heading to long-term brain injury.
- While the Scottish study illustrates that there appears to be an increased risk of longer-term neurological conditions among former professional football players it is not possible to determine the cause of this increased risk.
- It is likely that professional football players are a substantially different cohort to junior and youth football players. While it is likely that repeated concussions can cause long-term neurological consequences for some athletes, no cause and effect relationship has been demonstrated. This is contrary to what is often reported in the main-stream media.

Heading & Rule Changes

Based on the available evidence at present we do not believe that there is any need to ban heading or alter the laws of the game. Through our NZF medical staff, our involvement with the ACC Sports Collaboration group and our relationship with FIFA we are actively reviewing new research and the need to change our position. Our current efforts are directed towards improving the awareness of concussion and promoting a conservative treatment approach.

The Treatment of Concussion

NZF has a clear concussion policy. With regard to NZF's approach to the assessment and treatment of concussion in football:

- NZF endorses the 5th Consensus Statement on Concussion in Sport.¹
- Concussion is everyone's responsibility. Any player, at any level of play, who sustains a concussion should be removed from play.
- NZF's concussion guidelines recommend that all players suspected of having a concussion are assessed by a medical doctor and that their return to play is guided by a doctor experienced in managing concussion.
- Younger players may be at a greater risk of both sustaining a concussion and of having a more prolonged recovery. NZF recommends that any injuries in



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younger players are treated more conservatively – and that they should have a more conservative return to play programme.

Prepared & Reviewed by:

Dr Mark L Fulcher

NZ Football Medical Director

Sport and Exercise Physician

FIFA Medical Committee Member

References

¹: McCrory P, Meeuwisse W, Dvorak J et al. .Consensus statement on concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016. Br J Sports Med 2017; 0:1-10.

²: Kontos AP, Braithwaite R, Chrisman SPD et al. Systematic review and meta-analysis of the effects of football heading. Br J Sports Med 2017;51:1118-1124.