

Heading the ball in football:

what do we tell our patients and why so long to action?

Immediate complications of traumatic brain injury are well recognised and generally appropriately addressed in sport. Of greater concern is the potential accumulative damage caused by repeated minor trauma. In a *BJGP* editorial in 1999 while medical officer for Exeter City football club, I raised concern over repeated heading of the ball.¹ This year, the Football Association (FA) has embarked upon a programme to identify the extent of the problem, but why has it taken almost 20 years to get to this point and what do we advise our patients?

LONG-TERM IMPLICATIONS

Chronic traumatic encephalopathy is a neurodegenerative condition first identified in boxers, characterised by mood, behavioural, and cognitive deficits. The natural history of the condition is unknown, but is likely to be caused by the shearing forces on brain tissue caused by acceleration and deceleration of repetitive head trauma. Until recently, the debate has been based on poorly controlled case studies and high-profile individual cases. For example, in 2002 the inquest into the English footballer Jeff Astle who died aged 59 with early-onset dementia found that repeated heading of a heavy leather football had contributed to his illness. However, supported by improved epidemiological studies^{2,3} and more accurate imaging techniques that can identify sub-clinical brain cell injury, an evidence base is emerging that confirms this relationship and in particular identifies children⁴ and women⁵ to be at particular risk.

UNNECESSARY DELAYS

In the US, American football players have taken a more proactive stance. In 2015, a final settlement was reached whereby the NFL would pay \$75 million for baseline medical examinations for retired players and an uncapped payment for those who can demonstrate harm. Why has the FA

taken so long to address this issue?

First, organisational incompetence. After the Astle inquest, research was commissioned by the FA and the Professional Footballers' Association (PFA), which was subsequently quietly dropped because of 'technical flaws'. Second, footballers have historically been viewed as short-term trading commodities where duty of care is interpreted as maintaining effective sporting function, rather than concern for long-term wellbeing. Third, players have been reluctant to raise concerns due to a negative impact on their careers. Fourth, the emphasis for football administrations has been on commercialisation within a tribal culture based on contacts, favours, and opaque deals. Negative consequences and potential litigation don't fit well with the carefully crafted marketing image of 'the beautiful game'.

TOO LITTLE, TOO LATE

Possibly forced into action by the NFL case and 13 years after the missed opportunity to address the issue, in 2015 the FA and PFA set up an independent expert medical panel to advise on the problem. Finally, this year, despite a mounting external evidence base, independent FA-sponsored studies have been commissioned, but it will be a number of years before these results are available. Calls by the PFA for the banning of heading the football in young children remain unaddressed.

The unacceptable delay in addressing this agenda is important to all those involved in football at whatever level, and reflects broader concerns about the priorities and culture of the football associations and the duty of care to the players at all levels they represent. But, from a practical perspective, what can GPs advise their patients? Amateur players should be made aware of the potential risks and advised to continue if they wish to until more guidance is forthcoming.

ADDRESS FOR CORRESPONDENCE

David Kernick

St Thomas Medical Group, Cowick St, Exeter EX4 1HJ, UK.

Email: david.kernick@nhs.net

Amateur female players remain a cause for more immediate concern. Worried parents should be advised to lobby their school to ban heading of the football.

David Kernick,
GP, Exeter.

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