**Heading a football raises the risk of dementia: Study of retired footballers finds that it can lead to brain damage**

* **A study of 14 footballers found four had a condition known to cause dementia**
* **Repeated blows to the head suffered on the field are thought to be the cause**
* **It comes 15 years after the death of England striker Jeff Astle who had dementia**

By [Victoria Allen Science Correspondent For The Daily Mail](http://www.dailymail.co.uk/home/search.html?s=&authornamef=Victoria+Allen+Science+Correspondent+For+The+Daily+Mail)

**PUBLISHED:** 01:43, 15 February 2017 | **UPDATED:** 02:14, 15 February 2017

Footballers could be risking dementia by suffering repeated minor injuries when they head the ball.

A study of 14 retired footballers found four had a condition known to cause dementia, while six had Alzheimer's disease.

Repeated blows to the head suffered on the field, from headers and colliding with other players, are thought to be the cause.

It comes 15 years after the death of England striker Jeff Astle, whose inquest suggested he developed dementia as a direct result of heading heavy leather footballs. The Football Association has recently been urged to consider a ban on children under 10 doing headers in training and matches.

A team from University College London studied 13 professional footballers and one amateur player, examining the brains of six after their deaths. They found four had chronic traumatic encephalopathy (CTE), which can cause dementia and has also been found in boxers and rugby players.

Footballers may be far less likely to suffer a concussion than boxers, but experts say there is 'evidence accumulating' that repeated mild head trauma can lead to brain damage which can cause or worsen dementia.

Lead author Dr Helen Ling, from UCL's Institute of Neurology, said: 'Our findings of CTE in retired footballers suggest a potential link between playing football and the development of degenerative brain pathologies in later life.'

She added: 'These players had the same pathology as boxers.'

The 'pressing question now', she said, was to determine how widespread the condition was among retired players.

'It is important to note that we only studied a small number of retired footballers with dementia and that we still do not know how common dementia is among footballers,' she said.

The first study to find CTE in retired footballers follows the news that three of the nine surviving members of England's 1966 winning World Cup team are living with Alzheimer's.

+9

Last month the son of one of them, Nobby Stiles, criticised the FA for failing to properly investigate a link between the sport and degenerative brain disease.

Researchers at UCL studied retired footballers referred to the Old Age Psychiatry Service in Swansea between 1980 and 2010, all who started playing and heading the ball in their childhood or early teens – and all had dementia.

These men had a far higher rate of CTE in their brains than the 12 per cent average in the general population, based on a previous study of 268 brains. The condition, like Alzheimer's, causes tangles of a protein called tau, believed to lead to dementia.

Dr Elizabeth Coulthard, consultant senior lecturer in dementia neurology at the University of Bristol, said the study was 'detailed and robust', although small.

**ENGLAND STRIKER JEFF ASTLE DIED OF BRAIN DISEASE**

+9

Former England and West Bromwich Albion striker Jeff Astle (right) died in 2002.

He was only 59 but doctors said he had the brain of a 90-year-old after suffering from chronic traumatic encephalopathy (CTE).

CTE is a progressive, degenerative brain disease found in individuals with a history of head injury, often as a result of multiple concussions.

An inquest ruled Astle died from dementia caused by heading footballs – the first British professional footballer to be officially confirmed to have done so.

Astle once commented that heading a football was like heading ‘a bag of bricks’.

His family set up the Jeff Astle Foundation in 2015 in order to raise awareness of brain injury in sport.

Danny Blanchflower, who captained Tottenham Hotspur during their double winning season of 1961, died after suffering from Alzheimer’s disease in 1993. He was 67.

His death has also been linked to heading the heavy, leather balls of the 1940s and 50s, along with fellow Tottenham players Dave Mackay, Peter Baker and Ron Henry.

Living legends from England’s World Cup squad of 1966 have also been diagnosed with Alzheimer’s, including Martin Peters, Nobby Stiles and Ray Wilson.

She said: 'There is evidence accumulating that repeated mild head trauma, such as from heading a football, can contribute to brain damage in later life that might cause or exacerbate dementia. 'However, we have yet to prove this with prospective studies.'

After striker Jeff Astle died, his daughter Dawn Astle said 'the game that he lived for killed him'. A coroner ruled that the 59-year-old, who was left unable to recognize his children, probably died from brain injuries from repeatedly heading a ball over his 20-year career. A re-examination of his brain in 2014 found he had CTE.

The heavy leather footballs of the past are no longer in use, but concerns remain over youngsters heading the ball.

A study by the University of Stirling, published last year, found footballers did up to 67 per cent worse in memory tests following routine heading practice, although they recovered within 24 hours.

Dr Tom Crisp, a consultant in sport and exercise medicine at the London Independent Hospital, has previously said a header is like a 'punch to the head'.

In December, amid concerns about youngsters' developing brains, the Professional Footballers' Association called for consideration of a ban on children under 10 heading the ball.

Dr James Pickett, head of research at the Alzheimer's Society, said: 'To be able to gather the robust data that we need, studies should include much larger numbers of participants than used here and need to compare footballers who do not have cognitive problems with those who do.'

Dr Charlotte Cowie, head of medicine at the FA, said: 'The Football Association takes the concerns around concussion and head injuries extremely seriously. In 2015 we established an Expert Concussion Panel which led to the publication of The FA Concussion Guidelines.

'These guidelines were designed to help recognise and manage concussion – from the time of injury through to a player's safe return to football.'

Read more: <http://www.dailymail.co.uk/health/article-4225776/Heading-football-raises-risk-dementia.html#ixzz4c3rCMOf5>   
Follow us: [@MailOnline on Twitter](http://ec.tynt.com/b/rw?id=bBOTTqvd0r3Pooab7jrHcU&u=MailOnline) | [DailyMail on Facebook](http://ec.tynt.com/b/rf?id=bBOTTqvd0r3Pooab7jrHcU&u=DailyMail" \t "_blank)