

Grieving parents call for scans after rugby collisions

Player, 22, complained of headache then collapsed

Family in plea for checks following all head injuries

Steven Morris

A young rugby player collapsed and died after a minor collision with an opponent during a practice match, an inquest in Exeter has been told.

Lily Partridge, 22, complained of a headache and left the pitch, then went into cardiac arrest. A scan revealed she had a blood clot between her brain and her skull, and she did not regain consciousness.

The inquest found Partridge's death had been an accident. After the hearing her parents, Jeff and Liz Partridge, said she had had previous concussions and called for rugby players who sustained head injuries to routinely receive brain scans.

They said: "Lily loved playing rugby



Lily Partridge, pictured at the 2015 World Cup, collapsed after 'minor contact' with an opponent during a practice match Photograph: Irving of Exeter

and her dream was to represent Devon. She was the victim of a tragic accident. No one is to blame for what happened to her.

"Rugby is a hard game and Lily took all the precautions to protect herself when playing. She had suffered a couple of concussions earlier in the year but had seen her GP and had followed the RFU protocols in taking time off not playing.

"A brain scan may have spotted any weakness caused by those head injuries. If we had known that her life may be in danger by playing rugby again, obviously she would have stopped immediately.

"Lily wore all the right gear when she played - the scrum-cap, mouth guard and so on - but that wasn't enough to save her.

"In her final match she felt dizzy and came off the pitch feeling unwell after a minor contact with another player. But she collapsed on the sidelines and never recovered. We would like to see all players at every level of the game - male, female, young or old - receive proper medical treatment for head injuries which would include scans. There are many thousands of girls and women playing rugby and Lily, like us, wants that to continue."

Their daughter, who worked as a zoo keeper, was a founder member of the Exonian Ladies team based at Topsham RFC.

Her team captain, Katie Lunnon, witnessed her teammate and friend's collapse in December 2015 - although no one had seen the collision with the opponent. She told the inquest that they ended the training session with a seven-a-side game with tackling but uncontested scrums.

Lunnon said: "I did see Lily involved in tackles but she didn't appear to have any after-effects at that time. However, a

couple of minutes later she was preparing to be part of an uncontested scrum, then I saw her walking towards the touchline and come off the pitch. I went over to see if Lily was OK. She said that she had a bit of a headache. I didn't really think anything of it as it was very cold and we were soaked through."

Partridge then passed out and coaches trained in first aid started to give her CPR.

Consultant radiologist Dr Michael Thomas told the hearing that Partridge had died from an acute bleed as a result of a trauma. He said two previous concussions suffered while playing rugby were not connected to her death and a scan

'If we had known her life may be in danger by playing rugby, she would have stopped'

showed that the blood clot and bleed had occurred just hours before.

Dr Rebecca Appelboom, consultant in intensive care at the Royal Devon and Exeter hospital, where Partridge was flown by air ambulance, said: "The scan of her head demonstrated a blood clot."

Stephanie Wilson, a lawyer representing the Rugby Football Union and Topsham RFC, said: "Before Miss Partridge joined the scrum she mentioned to the referee that she had a headache.

"The referee asked if she was OK and if she had hit her head and Miss Partridge said that she was fine and she had knocked her head earlier."



The Institution of Engineering and Technology (IET) is a world-leading professional institution for engineers and technicians, with a mission to inspire, inform and influence the global engineering community. Fellow is the highest category of membership, awarded to individuals who have demonstrated significant personal responsibility, professionalism and sustained high levels of achievement in areas relevant to the IET. We are delighted to announce the recent election/transfer of the following to Fellow of the IET:

Newly Elected Fellows – September 2016

Professor Yiu-ming Cheung – Hong Kong, Tin Shui Wai
Eur Ing Nicholas Clark – England, Reading
Dr Rob Donnan – England, Chelmsford
Dr Jerry Fishenden – England, London
Professor Yim Fun Hu – England, Moncton
Professor Hsiang-Cheh Huang – R.O.C. Taiwan, Kaohsiung
Professor Cheng-Jian Lin – R.O.C. Taiwan, Taichung City
Professor Andrea Massa – Italy, Rossiglione
Mr Andrew McHarrie – Wales, Holywell
Mr Daniel McHugh – England, Guildford
Professor Philip Nelson – England, Romsey
Mr Andrew Watts – England, London
Professor Qihui Wu – P.R. China, Qinhuai District

Newly Elected Fellows – October 2016

Mr Richard Adams – England, Hebburn
Dr Antony Allen – England, Lichfield
Dr Robert Boily – Canada, Laval
Dr Stuart Burdett – England, Farnham
Mr Ross Deacon – England, Middlesex
Mr David Durkin – England, Kilmersdon
Dr Chengwu Duan – P.R. China, Songjiang District
Dr Khaled Elgaid – Scotland, Bishopbriggs
Mr Michael Ewart – England, Houghton le Spring
Professor Simon Godsill – England, Cambridge
Dr Hui Goh – Malaysia, Johor Bahru
Mr Tim Hamer – England, Harpenden
Dr William Howells – England, Whitstable
Dr Cathy McClay – England, Warwick
Mr James Moch – England, Hartwell
Ms San Mya – England, Croydon
Dr Maurizio Pilu – England, Bromley
Mr Daniel Prata – Portugal, Quinta do Anjo
Mr Alexander Richards – England, Moulton
Miss Nicola Shaw – England, London
Dr Mahesh Sooriyabandara – England, Westbury on Trym
Mr Robert Surrell – England, Warrington
Mrs Dani Strickland – England, Sheffield
Dr Paul Tsui – Hong Kong, Kowloon
Professor Peter Zeng – P.R. China, Beijing

Newly Elected Fellows – November 2016

Mr Christopher Beadsworth – England, Oldham
Mr Fengming Cao – England, Bradley Stoke
Professor Constantinos Constantinou – England, Birmingham
Mr Stephen Glover – England, Cirencester
Mr Alistair Hillery – England, Wigan
Dr Sun-Yuan Hsieh – R.O.C. Taiwan, Tainan City
Professor Yuefeng Ji – P.R. China, Beijing
Professor Janice Kiely – England, Chepstow
Mr John Laughlin – England, Reading
Mr Ching Yuk Man – Republic of Ireland, Shannon
Dr Steven Murdoch – England, Cambridge
Mr Richard Petrie – England, Berkhamsted
Dr Anand Prasad – Japan, Miyamaeku
Eur Ing Samantha Raincock – England, Hexham
Ms Elaine Roberts – England, Winchester
Dr John Russell – England, Camberley
Mr Siu Wai Tang – Hong Kong, West Point
Mr Christopher Turner – England, Hampton
Professor Yuhao Wang – P.R. China, Nanchang
Professor Alan Willner – U.S.A., Los Angeles
Dr James Wrigley – England, Alton
Professor Yung-Hsien Wu – R.O.C. Taiwan, Hsinchu
Professor Fei Richard Yu – Canada, Kanata

Newly Elected Fellows – December 2016

Mr Adolph C Bakken, III – U.S.A., Madison
Dr Horn Nath Dhakal – England, Southsea
Professor Yejun He – P.R. China, Shenzhen
Dr Erol Hepsaydir – England, Maidenhead
Dr Daniel P K Lun – Hong Kong, Kowloon
Mr Liam Madden – England, Stevenage
Mr Peter Shaw – England, Manchester

Mr Ian Warry-Thomas – England, Cheltenham
Professor Hongnian Yu – England, Bournemouth
Professor Yuxin Zhao – P.R. China, Harbin

Newly Elected Fellows – January 2017

Mr Richard Brooking – Scotland, Kilmarnock
Mr Paul Darlington – England, Crewe
Mr Ian Davis – England, Crowborough
Dr David Humphreys – England, Ascot
Mr Giles Johnston – England, Killingworth
Dr Seifedine Kadry – Kuwait, Egaila
Mr Martin Knight – England, Taplow
Dr Canbing Li – P.R. China, Changsha City
Professor Zhigang Liu – P.R. China, Chengdu
Mr Robert Lynch – England, Guildford
Dr Robert Maunder – England, Southampton
Mr Martin Miller – England, Lutterworth
Dr Keivan Navaie – England, Cheshire
Professor Dimitrios Nikolopoulos – Northern Ireland, Belfast
Dr Wanxing Sheng – P.R. China, Beijing
Mr Daniel Westerman – England, Stratford upon Avon
Dr Hin Yong Wong – Malaysia, Kuala Lumpur
Dr Kainam Wong – P.R. China, Lantau Island
Professor Ching-Nung Yang – R.O.C. Taiwan, Kaohsiung

Newly Elected Fellows – February 2017

Professor Yoshihiro Baba – Japan, Kyoto
Dr Stephen Beeby – England, Bishops Cleeve
Mr Joseph Bright – Australia, Buderim
Professor Yijia Cao – P.R. China, Changsha
Brigadier Darren Crook – England, Melksham
Mr Rob Deakin – England, London
Mr Jonathan Fenn – England, Great Witley
Mr Peter Ford – England, Hucclecote
Mr Takhliq Hanif – Scotland, Glasgow
Mr Shaun Hoppins – England, Hartley
Professor Ping Ju – P.R. China, Nanjing
Mr Stuart Justice – Scotland, Glasgow
Professor Sangarappillai Lambodharan – England, Loughborough
Dr Xiangjun Li – P.R. China, Changping District
Dr Scott McCulloch – England, Reading
Mr David Parr – England, Eccleston
Dr Stuart Redshaw – England, Nottingham
Mr Jonathan Wills – England, Farnham
Mr Jeremy Wright – England, Andover

Newly Elected Fellows – March 2017

Professor Ashraf Aziz – Egypt, Cairo
Mr Alan Banks – England, Chelmsford
Mr Michael Barton – England, Camberley
Dr Kai Bongs – England, Birmingham
Mr Darren Capes – England, Scunthorpe
Mr Andrew Cooksley – England, Oswestry
Mr Prakash Davda – England, Hampton
Professor Innocent Davidson – South Africa, Durban
Mr Ross Galbraith – Scotland, Kinross
Mr Vincent Goss – Scotland, Aberdeen
Dr Govindarajan Gopalakrishnan – India, Chennai
Dr Amit Gupta – Singapore, Bukit Batok
Mr Colin Hays – England, High Wycombe
Mr Richard Hefford-Hobbs – England, Kedington
Mr Jeffrey Hill – England, Andover
Mr Joe Jurado – England, Wolvey
Dr Michael Kio – U.S.A., Gaithersburg
Mr Chi Keung Lam – Hong Kong, North Point
Professor Andrew McNaughton – England, Beckenham
Mr Sean Meagher – Ireland, Naas
Mr Wayne Murrell – England, Kenilworth
Ms Sara Murray – England, London
Dr Adesegun Ogunsola – U.A.E., Mohammed Bin Zayed City
Mr Roy Pemberton – England, Manchester
Professor Arthur Petersen – The Netherlands, Bilthoven
Mr Andrew Walker – England, Lichfield
Mr Stephen Young – Scotland, Edinburgh

Anger at suspended prison term in animal cruelty case

Steven Morris

Animal rights activists have criticised a decision not to jail a farm apprentice whom they secretly filmed hitting, throwing and stamping on newborn calves at a Somerset farm.

Owen Nichol, 18, who attacked the calves and a cow at Pyrland Farm in Taunton, was given a 12-week prison sentence, suspended for one year, and 150 hours of unpaid work by the town's magistrates.

Nichol was caught on film by Animal Equality after a tipoff from a neighbour about what was happening at the farm. During a four-minute clip, Nichol is seen kicking a cow who has just given birth, slapping her and slamming a gate on her. He throws her calf six times, kicks its body and face and slaps it. He then kicks and stamps on another calf seven times.

The teenager, who was dismissed as soon as the footage was released, told RSPCA investigators: "I just flipped." He admitted two charges of causing unnecessary suffering to the animals. Peter Reed, chair of the bench, told Nichol: "Your behaviour in the incident was absolutely unacceptable. The offence was deliberate, it was sustained."

Reed said the offences passed the custody threshold, but Nichol would be given a suspended sentence because of his age,

lack of previous convictions and circumstances at the time. "You were working under pressure, you were working beyond your capabilities" Reed said. Nichol's grandmother had been in hospital, he had split up with his girlfriend and he had had little sleep because he had been also working for his father, the court heard.

Dr Toni Shephard, Animal Equality's UK director, expressed concern at the sentence. He said: "We are extremely disappointed that this dairy farm worker has



Owen Nichol, 18, was caught on film kicking a cow who had just given birth and throwing her calf. He told inspectors that he had 'just flipped'

not been sent to prison for the disgusting attacks on vulnerable cows and calves revealed by our investigation. Anything less than a custodial sentence is a wholly inadequate punishment for these disturbing acts of cruelty."

In a report for the RSPCA, Andrew Biggs, a past president of the British Cattle Veterinary Association, said: "This is the worst example of abusive behaviour I have seen in the 35 years I have been a veterinary surgeon."

Multi-legged fossil with pincers changes science's view of crabs

Nicola Davis

A fossilised ancient creature boasting huge pincers resembling can-openers, a hinged two-piece shell and more than 50 pairs of legs has been discovered, shedding light on the evolutionary past of a huge and diverse group of animals.

Researchers say the creature, thought to have lived about 507 million years ago during the Cambrian period, offers insights into the early body plan of mandibulates - a group encompassing creatures including millipedes, crabs and insects. The group takes its name from the presence of mouth parts known as mandibles, which the animals used to help eat food. The sturdy-looking creature was about 10cm long and would have walked on the sea floor.

Previously discovered fossils of similar creatures with two-part shells had lacked details around the head, including evidence of mandibles. Such fossilised animals had been proposed to be early forms of a category of creatures known as "true

arthropods". This category includes both mandibulates and other invertebrates, including spiders and the extinct marine creatures called trilobites.

But the new discovery, published in the journal Nature, squashes that idea, suggesting that rather than occurring at the base of the true arthropod family tree, these creatures instead evolved later and are in fact early mandibulates. Unearthed near Marble Canyon in the Canadian Rockies, the creature has been named *Tokumia katalepsis* - a nod to the Tokumm Creek that is surrounded by the Marble Canyon and the Greek word for grasping.

Graham Budd, professor of palaeobiology at Uppsala University in Sweden, cautiously welcomed the discovery. "If it is true, [this shows] that a large number of quite important fossils from the Cambrian are actually all close relatives of the modern-day crustaceans and insects," he said. "This is very significant because for the first time it allows us to really understand the origins of this really important group of organisms."

Have you considered becoming an IET Fellow? For more details, visit www.theiet.org/fellows or contact fellowship@theiet.org