

# Hughes suffered extremely rare, freak injury to neck

[Phillip Hughes](#) was the victim of a freakish accident, the kind that is rarely seen in any sphere of life and has only once before been recorded as the result of being struck by a cricket ball.

When Hughes was hit in the neck by a ball during the Sheffield Shield match between New South Wales and South Australia at the SCG on Tuesday, one of the main arteries to his brain was compressed, and such trauma can often be immediately fatal. Hughes initially stood for a second or two before collapsing forwards onto the ground, as players rushed to his assistance and called for medical help.

"Phillip took the blow at the side of the neck and as a result of that blow his vertebral artery, one of the main arteries leading to the brain, was compressed by the ball," Peter Brukner, the Cricket Australia doctor, said on Thursday. "That caused the artery to split and for bleeding to go up into the brain. He had a massive bleed into his brain. This is frequently fatal at the time.

"However, Phillip was resuscitated and then managed by, in particular, Dr John Orchard, the Cricket NSW doctor, and paramedical staff, and we were fortunate enough to have Dr Tim Stanley, an intensive care specialist from Newcastle, who was in the crowd and came and helped. They all did an excellent job of keeping Phillip alive and he was able to be transported by ambulance to hospital in reasonable condition."

Hughes was transported to the nearby St Vincent's Hospital in Sydney and was quickly admitted for surgery. Dr Tony Grabs, the trauma director at St Vincent's, said it was necessary to immediately relieve the pressure on Hughes' brain from the compressed artery.

"The head injury that he suffered was catastrophic," Dr Grabs said. "He arrived well intubated and [had been] resuscitated very well. It was our recognition that the first priority in this situation is to get an urgent CAT scan of the head to determine what we can do. This CAT scan occurred very early and it was recognised early that we had to make an intervention into the brain to actually help get the pressure down in the brain.

"What sometimes happens in the brain is, if you put blood around the brain, a small amount, you will start to become a bit drowsy. If you put a lot of blood around the brain, you will become unconscious. Once we had made the diagnosis of blood around the brain, and it's a subarachnoid blood, which is under pressure from the artery, the immediate transfer to theatre was necessary. He went to theatre and had extensive surgery to remove some of the skull around his brain to help allow the brain to expand so it wasn't compressed."



Peter Brukner, the Cricket Australia doctor: 'It was an injury to the neck that caused haemorrhage in the brain' © Getty Images  
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The surgery took approximately 80 minutes and Hughes was then transferred back to the intensive carer unit and placed in an induced coma, in order to allow the brain to rest. However, Hughes showed little improvement over the next 48 hours and [died on Thursday afternoon](#).

Asked whether faster ambulance transport to the hospital on Tuesday could have helped Hughes survive, Dr Brukner said such matters were more important when a patient was not receiving treatment.

"I think ambulance waiting time is really more relevant when the injured or sick person is not being treated," Dr Brukner said. "By any standard or observation he was receiving excellent quality treatment from Dr Orchard and Dr Stanley and the paramedics at the ground, and hence arrived at the hospital in excellent condition."

Dr Brukner said that while it was worthwhile reviewing safety equipment and procedures, including helmet design, it was important to understand how extraordinarily rare such an incident was.

"This was a freakish accident, because it was an injury to the neck that caused haemorrhage in the brain," he said. "This condition is incredibly rare. It's called vertebral artery dissection, leading to subarachnoid haemorrhage - that's the medical term for it.

"If you look in the literature there's only about 100 cases ever reported, so this is incredibly rare. Only one previous case ever reported as the result of a cricket ball. So I think it's important to realise that yes, we need to review all our procedures and equipment, but this is an incredibly rare type of injury."

Dr Grabs said it was unlikely St Vincent's Hospital had ever seen an injury of that nature.