

factors, for example, the footwear that assailants are wearing or if they are struck blows with an implement. It is often the mechanism that is important. If a person is hit with a baseball bat, the scalp is lacerated and bruised but the brain is often intact. Whereas if someone is kicked about the head and the brain is shaken they may suffer serious damage to the brain inside. I consider that there is no correlation between the severity of the external injuries and the severity of the diffuse axonal injury.

14. I have been referred to my evidence at trial which is produced and shown to me at page **8502** where I said “there is very clear evidence, documented work, to show that this type of injury occurs in assault.” I go on to say, “ It is however, recognised as occurring in assaults but curiously this lesion has not been described in any work which has been done on boxers.” I think what I was explaining is that there has been some work done on the brains of boxers who have died and they don’t show diffuse axonal injury. Whether this is because their heads are moving when they are struck, I do not think we quite know. What we do know is that people who are assaulted and particularly those who are lying on the ground when they are kicked, do show this injury.
15. It is a curious anomaly and we are not sure why this is the case. It may be that punching is not enough to cause diffuse axonal injury. It may require more force than that and presumably the amount of force that can be generated by kicking someone is more severe. It is fair to say that diffuse axonal injury is a relatively recent concept of brain injury which has only become more recognised over the past few years. Our understanding of it is increasing and in what circumstances it tends to occur. To some extent I think that clinicians are not perhaps as fully aware of it as pathologists are because there is nothing to see in the patient on scans.
16. Diffuse axonal injury shows up in pathologist’s findings as the level of detail is greater on a microscopy than on a CT scan. This level of detail can only be achieved post mortem when the brain has been sectioned. A further problem is that our ability to detect this type of injury depends to some extent on the period of time that the patient survives as well. For example if someone dies a couple