Management of fractured cervical vertebra (04HDC01638, 29 June 2005)

Public hospital ~ Emergency department ~ Radiologist ~ Neck trauma ~ Cervical fracture ~ Examination ~ Investigation ~ X-ray ~ Diagnosis ~ Interpreting results ~ Standard of care

The mother of a 13-year-old girl complained about the standard of care provided to her daughter by a hospital and one of its radiologists when they failed to diagnose a neck fracture on three separate occasions. The complaint was not upheld.

The girl fell from a tree, hurting her head and neck and losing consciousness for about three minutes. She was taken by ambulance to the emergency department of the local hospital. At the hospital she was examined, had X-rays taken, and was kept under observation for the concussion. When the X-rays appeared normal and the pain had eased, the girl was discharged with advice to come back if the pain returned.

The girl was readmitted eight to nine hours after discharge, having collapsed and lost consciousness for two minutes. The emergency department staff reviewed the diagnosis by re-examining the previous day's X-rays. They upheld the diagnosis of a soft tissue injury to the neck, and gave the girl a semi-rigid neck collar and arranged a follow-up visit to the orthopaedic clinic. That same day, a radiologist at the hospital reviewed the previous night's X-rays and found no evidence of fracture.

A week later the girl returned to the emergency department for a third time, as she was experiencing increasing neck pain. The attending doctor arranged for more extensive X-rays to be taken. The doctor and her senior colleague could not see a fracture on these X-rays, and so, on the clinical evidence available, concurred with the diagnosis of a soft tissue injury. They told the girl to visit her general practitioner within the next week and confirmed the outpatient appointment.

The following day, a radiologist at the hospital reviewed the new X-rays and detected a fracture. The result was reported immediately, the girl recalled to the hospital, and treatment commenced.

It was held that as there were no convincing fracture lines discernable in the first set of X-rays, the radiologist did not breach the Code by providing inadequate care. Further, the identification of the fracture by the other radiologist from the second set of scans was an excellent diagnosis and one many radiologists would have overlooked.

It was also held that the public hospital did not breach the Code. Staff investigated thoroughly, remained open in revisiting the initial diagnosis on subsequent presentations, and followed protocols on possible cervical spine injuries.