EMERGENCY CASEBOOKS

Posterior dislocation of hip in adolescents attributable to casual rugby

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A 11 year old boy was brought to the accident and emergency department with a painful left hip after having been injured in a tackle in a casual game of rugby. On examination the hip was found to be flexed, adducted and internally rotated with no distal neurovascular deficit. All movements of that hip were extremely painful. Posterior dislocation of hip was confirmed by radiograph (fig 1). This was reduced under general anaesthesia within three hours of the injury. After reduction he was on skin traction for a week and followed by non-weight bearing mobilisation for a further four weeks. Computed tomography was done to rule out any intra-articular bone fragments. He had regained full range of movements at

eight weeks and magnetic resonance imaging of the hip at six months ruled out avascular necrosis of the head of femur.

Posterior dislocation of hip usually occurs when force is directed proximally up the shaft of femur from knee to the flexed hip¹. Although it is commonly seen after high energy road traffic accidents, it can occur in children resulting from relatively minor injury such as a casual game of rugby as reported here. Such dislocations have been reported attributable to jogging, skiing, mini rugby² and basketball. Major complications of traumatic hip dislocation include nerve injury, avascular necrosis of femoral head, secondary osteoarthritis, coxa magna, premature epiphyseal fusion, recurrent dislocation and persistent limp. After such dislocation the overall incidence of hip abnormality at skeletal maturity is around 30%.

The factors that predispose to complications are older age, delay in reduction and associated fracture of both femoral head and acetabulum. From our review of the literature it is evident that these injuries are not uncommon and a high index of suspicion is required as early recognition and prompt relocation can prevent potentially serious complications.

Funding: none.

Conflicts of interest: none.

- 1 Glass A, Powell HDW. Traumatic dislocation of the hip in children. An analysis of 47 patients. *J Bone Joint Surg (Br)* 1961;43:29–37.
- 2 Rees D, Thompson SK. Traumatic dislocation of the hip in a mini rugby. *BMJ* 1984;289:19–20.
- 3 Funk FJ Jr. Traumatic dislocation of the hip in children. Factors affecting prognosis and treatment. *J Bone Joint Surg (Am)* 1962;44:1135–45.

Figure 1 Posterior dislocation of hip.

Retropharyngeal haematoma after blunt trauma

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An 88 year old woman fell onto her Zimmer frame striking her chin. Six hours later she developed difficulty in breathing with a hoarse voice and neck swelling, at which time she presented to the accident and emergency department. On arrival she had stridor, a hoarse voice and a large diffuse neck swelling mainly on the left side. She underwent an urgent radiograph of the neck and computed tomography. The lateral radiograph of the neck revealed a large retropharyngeal soft tissue swelling (fig 1). Computed tomography revealed a large soft tissue swelling posterior to the trachea. The appearances were consistent with an extensive retropharyngeal/tracheal haematoma tracking into the posterior mediastinum and base of skull (fig 2). The patient was admitted for observation. Over the next 24 hours, her respiratory problems resolved.

Retropharyngeal haematoma not associated with a cervical fracture is a rare occurrence.¹ The retropharyngeal space is bounded anteriorly by the buccopharyngeal fascia and posteriorly by the prevertebral fascia and it extends from the base of the skull to the level of the 1st thoracic vertebra. Aetiologies include blunt trauma as in the case presented,² oesophagoscopy, endotracheal and nasogastric tube intubation, hyper-extension of the neck, fish bone ingestion, whiplash injury, and complication of warfarin treatment. Our patient was receiving long term aspirin treatment (75 mg). Patients may present with varied symptoms, which include airway obstruction, neck swelling, stridor, hoarse voice, dysphagia, neck pain and neck stiffness. Valuable investigations include a

lateral radiograph of the neck, which demonstrates the retropharyngeal soft tissue swelling. A prevertebral soft tissue thickness of greater than 7 mm in the cervical vertebrae C1–C4 and/or 22 mm in the cervical vertebrae C5–C7 suggests significant pathology.³ The absence of any active bleeding cannot be excluded by computed tomography alone although none was demonstrated in this case. If there was deterioration in the patient's condition further imaging such as angiography may locate a source of bleeding.

The rapid resolution of respiratory symptoms and stable vital signs indicate a good prognosis as in this case. Retropharyngeal haematoma is a potentially life threatening event with the danger of acute airway obstruction. Investigation to confirm the diagnosis should be carried out promptly with an anaesthetist present in case intubation or surgical airway is needed. Surprisingly, despite the presence of stridor and radiological prevertebral soft tissue swelling of 50 mm our patient did not need any airway intervention.

Funding: none.

Conflicts of interest: none.

- 1 Robert O, Mitchell MD, Todd Heniford MD. Traumatic retropharyngeal haematoma a cause of acute airway obstruction. *J Emerg Med* 1995;13:165–7.
- 2 Daniello NJ, Goldstein SI. Retropharyngeal haematoma secondary to minor blunt head and neck trauma. *Ear Nose Throat J* 1994;73:41–3.
- 3 Raby N, Berman L, De Lacey G. *Accident and emergency radiology. A survival guide*. London: WB Saunders, 1996.

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Figure 1 Lateral radiograph of the neck showing soft tissue swelling.

Figure 2 Computed tomography showing extent of haematoma.

Radiology case report: a nasty orbital abscess

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A 17 year old boy was assaulted with a skateboard, from which he sustained a laceration to his forehead and below his left eye. His wounds were closed primarily in accident and emergency and he was given a course of oral flucloxacillin. He returned to the department two days later having become increasingly unwell with lethargy, fever, and marked swelling with tenderness over the left lower eyelid.

On examination he had a tachycardia of 120 and a pyrexia of 38.9. He had mild chemosis of the left eye with a visual acuity of 3/24 compared with 4/6 in the unaffected right eye. Plain facial radiographs were taken. These showed an abscess with a fluid level in the region of the lower left eye (fig 1). No foreign bodies were seen and there were no facial bone fractures.

Computed tomography showed a large gas containing abscess present in the soft tissues of the left inferior orbital region. The abscess extended posteriorly into the anterior part of the orbit with the globe elevated. No fractures were visible into the paranasal sinuses (fig 2).

After discussion with the duty microbiologist, intravenous augmentin, flucloxacillin, metronidazole and ciprofloxacin were given.

Drainage of the abscess under general anaesthesia was performed. On initial incision gas under pressure escaped from the wound.

Figure 2 Computed tomography showing abscess.

Some 15 ml of pus was drained and was sent for culture. The wound was explored and several pieces of (skateboard) wood were removed from the wound. The wound was thoroughly irrigated, left open and packed with betadine gauze.

Urgent Gram stain showed +++ WBCs, +++ Gram negative rods and + Gram positive cocci. Subsequent culture grew +++ *Haemophilus* sp, +alpha haemolytic streptococcus and scanty *Enterococcus* Sp.

He was treated with daily packing of the cavity with Betadine dressings and made an excellent recovery with discharge five days later. He was put on a one week course of oral Co-Amoxiclav. His vision recovered completely and the wounds healed satisfactorily.

Facial wounds and injuries should be treated aggressively as facial infection can rapidly spread orbitally and intracranially. Gas forming organisms and other anaerobes are often present in grossly contaminated wounds. Intravenous antibiotics need to cover in particular *Clostridia*, *Pseudomonas*, *Staphylococcal* and *Streptococcal* species. Unchecked infection may result in osteomyelitis, paralysis of motor nerves, optic neuritis and permanent blindness. Wood retained in the orbit may cause granuloma, abscess or fistula.

There must be a low threshold for direct deep exploration of wounds, if necessary performed under general anaesthesia.¹ The tract should be explored to the apex using narrow malleable retractors. The wound should be left open postoperatively.

Funding: none.

Conflicts of interest: none.

¹ Ferguson III EC. Deep, wooden foreign bodies of the orbit a report of two cases. *Trans Am Acad Ophthalmol Otol* 1970;74:778-87.

Figure 1 Plain radiograph showing abscess and fluid level.

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