

The most frequently reported presenting symptom was headache, notable because it is often accurately localised (even by very young children). Behavioural problems, a change in personality and reduced mental function were the second most frequently reported signs and occasionally the only presenting features. They are very difficult to elicit and rely on an accurate history from parents or other carers. Ataxia, cerebellar signs, and falls to one side were reported more commonly than nausea, vomiting, and visual disturbance, which are the more familiar indicators of intracranial disorder. Seizures were seen in only one case.

Of additional interest were two cases who presented with solitary ipsilateral cranial nerve lesions associated with arachnoid cysts.^{2,9}

In conclusion, haemorrhage into a pre-existing arachnoid cyst is a rare but important diagnosis after minor head trauma. Symptoms and signs are non-specific and rely on an accurate history and carer observations. With this in mind, the emergency physician should have an index of suspicion and consider computed tomography outside of standard guidelines when presenting features could be consistent with this disorder.

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Acute appendicitis after a fall from a ladder: a traumatic aetiology?

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Acute appendicitis is the commonest emergency condition requiring surgery in the United Kingdom. Its precise aetiology, however, remains unproven: dietary, genetic factors, and infectious agents have been implicated.¹ Trauma has also been proposed as a cause of acute appendicitis, but there are doubts as to whether this is a casual or causal relation. In this case report we produce compelling evidence that trauma can cause acute appendicitis.

CASE REPORT

A previously fit 60 year old man was admitted with abdominal pain three days after a fall from a ladder. The mechanism of injury was that the foot of the ladder slipped away with the patient falling from about six feet to land prone on the rungs of the ladder. The patient presented with increasing right lower quadrant pain, worse on movement. Appetite was reduced; the patient was not vomiting and was passing flatus. He was becoming short of breath with a productive cough. On examination he was feverish, 39.7°C, and tachycardic. Abdominal examination revealed tenderness in the right iliac fossa and right groin. There was a firm swelling in the right groin with overlying bruising extending over the femoral triangle of the right thigh with associated scrotal oedema. Routine blood tests showed a leucocytosis. A chest roentgenogram

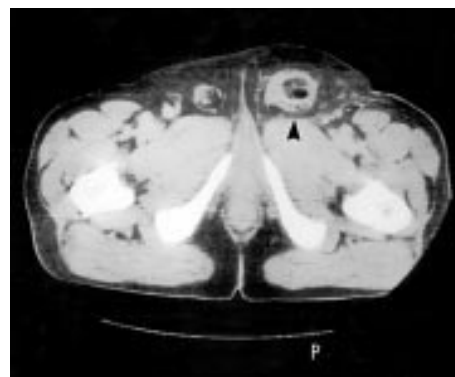


Figure 1 Computed tomogram demonstrating dilated loops of small bowel, and incarceration of oedematous bowel in a right inguinal hernia (arrowed).

gram demonstrated patchy consolidation at the base of the right lung; dilated loops of small bowel were seen on an abdominal roentgenogram. Computed tomography revealed dilated loops of small bowel, incarceration of oedematous bowel in a right inguinal hernia, and oedematous changes in

the right perirenal tissues (fig 1). At operation the right indirect inguinal hernia was found to contain a gangrenous appendix with free pus in the abdominal cavity. Appendicectomy was performed, a tube caecostomy was brought out, and the hernia was repaired with a darn repair. After an initially stormy postoperative course the patient had made a full recovery by follow up at six weeks.

DISCUSSION

Blunt trauma has been proposed as a cause of acute appendicitis: Houdini is said to have died from a rupture appendix after a blow to the abdomen.² Crush injury, a fall on bicycle handlebars, and seat belt compression after a road traffic accident have all been implicated.³⁻⁴ Haematoma or oedema of the appendiceal wall with consequent luminal obstruction proposed as the initiating pathophysiological event in the development of acute appendicitis. The difficulty with the previous reports in explaining whether trauma could cause appendicitis resides in the fact that a free lying or retrocaecal appendix would be unlikely to be injured in isolation, subsequent development of acute appendicitis after trauma being coincidental. In this case though, an appendix lying in an inguinal hernia would be more vulnerable to injury, allowing blunt trauma to compress the appendix against the unyielding pubic bone. We believe this case presents compelling evidence that blunt trauma can be a causative agent in the development of acute appendicitis.

Contributors

R Hagger had main responsibility for writing the manuscript. J Constantinou produced the figure and commented on the manuscript. S Shrotria reviewed and helped write the manuscript.

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Anterior shoulder dislocation: an unusual complication

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A case of transection of anterior circumference humeral artery, a branch of the 3rd part of the axillary artery is reported, after a simple anterior shoulder dislocation. This complication though rare could potentially result in catastrophic consequences for the patient. It should therefore be recognised early and a coordinated prompt vascular and orthopaedic surgical treatment given for better upper limb functional outcome.

A 91 year old man presented to the emergency department with severe right shoulder pain having tripped and fallen onto the shoulder about 40 minutes earlier.

He has had no previous injuries to this shoulder.

Although he had myocardial infarction nine years previously, he has no other past medical history. He was not on any medication and was fully independent.

He had normal triage observations, which were as follows; pulse rate 55/min; respiration rate 16/min; blood pressure 148/75 mm Hg; oxygen saturation 98%.

His physical examination revealed an obvious anterior dislocation of the right shoulder with normal neurovascular examination.

After administration of intravenous analgesic (10 mg morphine sulphate), radiographs were obtained, which confirmed simple subcoracoid anterior glenohumeral dislocation.

This was easily relocated soon after under Entonox (a mixture of nitrous oxide and oxygen containing 50% of each gas) using Kocher's method and confirmed radiographically.

Within minutes of relocation, the patient began to experience increasing pain in the shoulder. Close observation revealed increasing deltopectoral swelling and bruising, which aroused a suspicion of internal haemorrhage despite having normal ipsilateral brachial and radial pulses. He remained haemodynamically normal and had normal full blood count and clotting screen.

The orthopaedic and vascular surgeons were called and elected to take the patient to theatre for urgent surgical exploration. They found a bleeding transected anterior circumference humeral artery with a massive tissue haematoma of approximately 300 ml within the axillary sheath. The haematoma was evacuated and haemostasis was achieved by ligation of the bleeding artery.

Although he recovered well from anaesthesia, he was left with a brachial plexus deficit and went on to suffer considerable morbidity including: wound infection with MRSA, septicaemia, acute renal failure, and stiff shoulder. Secondary closure of his surgical wound was carried out by plastic surgeons and he was finally discharged from the ward eight weeks later. He is currently making good progress with outpatient physiotherapy.

DISCUSSION

Simple anterior glenohumeral dislocation accounts for approximately 50% of all dislocations seen in emergency departments and tends to be most frequent in healthy men.¹

It is rarely associated with vascular complications but the axillary artery or its branches may be damaged,² often with