age secondary to hypoxic tissue injury[4] and mediator release as a result of neutrophil activation.[5] Prior oxygenation has been shown to prevent RPO in animals.[3] Circulatory collapse is a result of fluid shifts within the thorax and pooling of fluid in the affected lung causing hypovolaemia. Packed cell volume rises,[3] as in the case reported here, and responds to prompt fluid resuscitation. Recollapse of the affected lung may in theory reverse the cardiorespiratory compromise but there are no reports of its application. The use of diuretics is contraindicated in the presence of hypovolaemia.

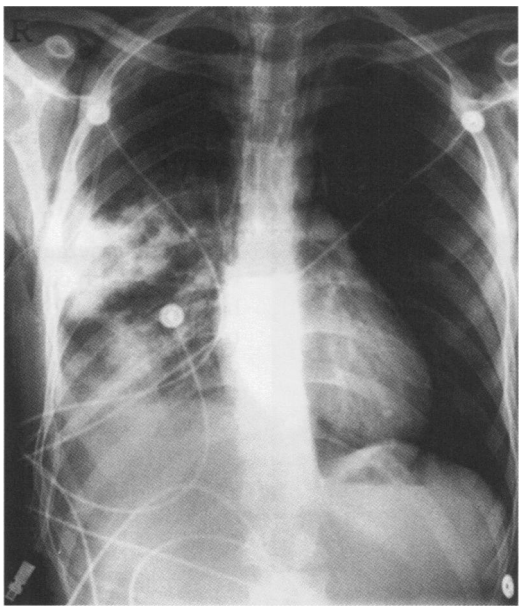

Figure 2 Right mid and lower zone opacification after lung re-expansion.

Treatment of a large pneumothorax that has been present for some days should aim for slow re-expansion, either by intermittent aspiration or intercostal chest tube drainage with intermittent clamping, together with close monitoring of vital signs. Dehydration and hypoxaemia should be corrected early. Suction should be avoided as an initial treatment.

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Trauma to a horseshoe kidney

A Daudia, T B Hassan, D Ramsay

Department of General Surgery, Leicester Royal Infirmary NHS Trust, Infirmary Square, Leicester LE1 5WW
A Daudia

Department of Accident and Emergency Medicine
T B Hassan

Department of Radiology
D Ramsay

Correspondence to:
Dr Daudia, Senior House Officer in General Surgery.

Patients with traumatic injury to a previously unsuspected horseshoe kidney are a rare presentation to the accident and emergency (A&E) department. Early recognition is important but can be difficult.

A 25 year old male was kicked in the lower abdomen while playing football. On arrival in the A&E department he complained of increasing lower and left sided abdominal pain. Examination showed him to be pale and diaphoretic with a pulse of 60/min and blood pressure measured at 100/60 mm Hg. His abdomen revealed diffuse guarding and rebound suggesting peritonism. He was managed along Advanced Trauma Life Support principles and an urgent ultrasound scan was arranged. This was reported as showing no free fluid, an absent left kidney, and a further small kidney attached to the lower pole of the right kidney. A diagnosis of crossed fused ectopia was made (fig 1).

On admission to a general surgical ward he was noted to be cardiovascularly stable with no signs of peritonism. Four hours later the patient passed 400 ml of fresh blood per urethra. An urgent intravenous urogram was arranged and this revealed a horseshoe kidney with fusion

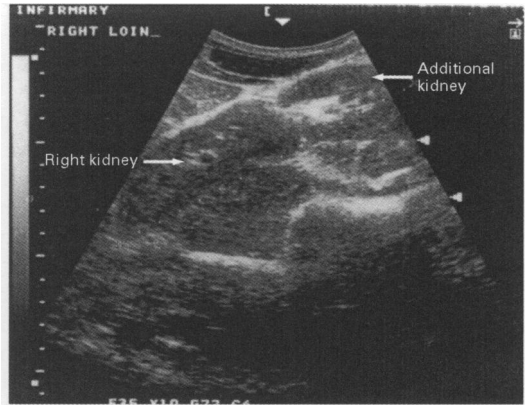

Figure 1 Abdominal ultrasound scan showing a small kidney attached to the lower pole of the right kidney.

across the midline which was extravasating from the left lower pole (fig 2). It was decided to manage him conservatively. However, 16 hours later the patient became hypotensive, tachycardic, and his haemoglobin concentration dropped from 131 g/l to 86 g/l. After resuscitation he underwent an urgent laparotomy which showed a large retroperitoneal haematoma with complete division of the left moeity. The rupture was repaired and a small area of the left

Figure 2 Intravenous urogram showing a horseshoe kidney extravasating from the left lower pole.

lower pole was excised. Postoperatively he made an uneventful recovery.

Horseshoe kidneys occur in 0.25% of the general population, being twice as common in males. One third to one half of cases are asymptomatic and may be found incidentally. Rarely they may present to the A&E department after blunt abdominal trauma. The kidney is compressed or fractured across the lumbar vertebrae during a road traffic accident—the "seat belt" syndrome.

Ultrasonography is a well established modality in assessing patients with blunt abdominal trauma.[1–3] Operator experience and expertise are the two main factors influencing sensitivity and specificity.[4] This case illustrates that the results of emergency ultrasonography should be viewed with caution in patients identified as having organ anomalies. Remember always to treat the patient and not the ultrasound. If in doubt computed tomography will provide more accurate information provided that the patient is stable.

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Intra-orbital foreign body: an unusual route of entry

S B Thakore, U Guly

A 40 year old man presented with right eye pain, claiming to have been hit in the face with a golf club. Examination revealed a large right periorbital haematoma. The eye was proptosed, his visual acuity was 6/5 in the left eye, but 6/36 in the right eye. Facial radiography showed a radio-opaque intraorbital foreign body on the right side. Examination under anaesthetic by an ophthalmologist showed no evidence of an intraorbital foreign body and no orbital entry site. After computed tomography (fig 1) nasal endoscopy was performed, revealing a laceration of the middle meatus through which the foreign body was removed. Visual acuity in the affected eye improved to 6/5, although minor diplopia remained.

This is the first reported case of a foreign body penetrating the orbit via the nose without leaving an external wound. The usual route of entry of a foreign body is direct penetration through the lower regions of the orbit.[1] Foreign bodies may be left in place if the patient is asymptomatic.[1] Removal is indicated in the

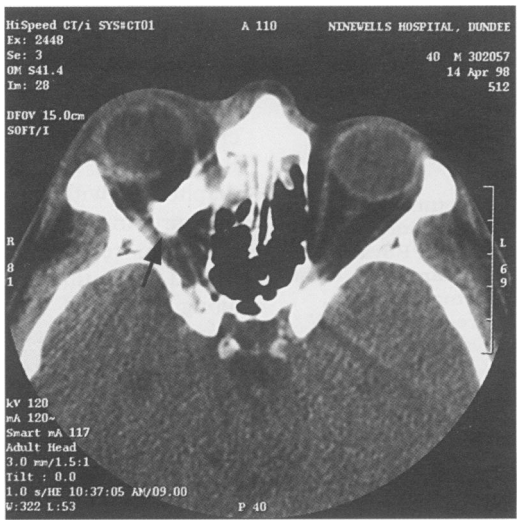

Figure 1 Computed tomography showing a metal foreign body within the right orbit associated with a fracture of the medial wall of the orbit. It is seen lying superior to the optic nerve and lateral rectus, and inferior to medial rectus (arrow). Medial rectus appeared to have been pierced by the foreign body; the globe appeared intact.

Accident and Emergency Department, Ninewells Hospital and Medical School, Dundee DD1 9SY
S B Thakore
U Guly

Correspondence to:
Dr Thakore, Specialist Registrar.