to stabilise the shoulder. They are then removed and mobilisation is begun. The remaining part of the fixator is removed when the fracture has united. Prophylactic antibiotics are given for the first 24 hours.

**Patients and results.** We have treated two patients by the technique described. The first, a man of 19, had the injury shown in Figure 2; the reduction is shown in Figure 3. The second, aged 36, had sustained a three-part fracture of the neck of the humerus, also with an anterior dislocation of the shoulder. The patients were assessed at 6 and 22 months respectively, utilising Neer's functional scoring system. Both patients achieved high scores (96 and 94) indicating an excellent result. No pin site infections occurred.

**Discussion.** Fracture-dislocations of the humerus represent a small proportion of displaced proximal humeral injuries. In reported series closed reduction and manipulation led to poor results (Clifford 1981; Mills and Horne 1985) and those of open reduction and internal fixation also were indifferent, so that the term unsolved fracture has been applied. There is no doubt that closed reduction is often difficult if not impossible, but it is greatly facilitated by insertion of a pin into the humeral head, so that open reduction can be avoided. Mobilisation of the shoulder can take place while stabilisation of the fracture is maintained by the fixator. Scarring is avoided and early pain relief is achieved. Moreover, stabilisation of the shoulder may well reduce the risk of recurrent dislocation.

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**A TECHNIQUE FOR REDUCING DIASTASIS OF THE SYMPHYSIS PUBIS**

**D. TALBOT, P. R. STUART, D. D. MILNE**

Gross pelvic fractures are often associated with severe blood loss from torn pelvic veins. Control of this is usually possible only after reduction of the pelvic ring and this can be physically demanding for both operator and assistant. The procedure can be facilitated by using an external fixator, pelvic reduction forceps (Jungbluth 1979) or a rib approximator (Fabian et al 1980). When laparotomy is required, we use a pelvic vice.

**Technique.** With the patient on the operating table, the two halves of the pelvic vice are placed opposite each other at the level of the greater trochanters (Fig. 1). The vice consists of vertical bars held to the table by adapted toggles. At the top of each bar is a threaded rod with a padded concave plate for contact with the patient.

Before surgery the vice is compressed to make skin contact only. The skin is prepared and draped so that the vice is beneath the towels and is manipulated by an unscrubbed assistant. At laparotomy any angled segments are manipulated into reasonable position with bone-holding forceps. The vice is then used to compress
the two halves of the pelvis together sufficiently to allow internal fixation.

Results. We have used the pelvic vice in six cases of unstable pelvic fractures with disruption of the sacroiliac joint requiring internal fixation. In all cases, reduction of the pelvic fracture was effortless. Figure 2 is the radiograph of a 38-year-old car driver who was admitted after a road traffic accident. He had a tense haematoma of his abdominal wall from haemorrhage of a dorsal penile artery due to the pelvic disruption. Haemostasis was achieved at laparotomy and the pelvic vice was used for reduction. Fixation was obtained by two Kirschner wires with tension banding, and a corset was applied (Fig. 3). After six weeks bed-rest he was mobilised and wore the corset for a further six weeks. Recovery was without complication.

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