detailed the use of intramedullary pin fixation for children’s fractures.

In our case, the Steinmann pins provided stable fixation and also facilitated reduction by improving control of the fracture segments containing the pins. The operative exposure and periosteal stripping were minimal and pin removal was easy, although requiring a second general anaesthetic.

This method is recommended for a type IV Monteggia injury in a child when closed reduction is unsuccessful.

No benefits in any form have been received or will be received from a commercial party related directly or indirectly to the subject of this article.

REFERENCES


STABLE FIXATION OF PENTALATERAL OSTEOTOMY FOR CUBITUS VARUS IN ADULTS

WIROON LAUPATTARAKASEM, BANCHONG MAHAISAVARIYA

A lateral closing wedge osteotomy for the correction of cubitus varus deformity usually preserves the medial cortex as a hinge to provide some stability in addition to internal fixation. Despite this, external immobilisation for three to five weeks is usually recommended (Graham et al 1990; Danielsson et al 1991), even in very young children. In adults, fully stable internal fixation is needed to allow early rehabilitation and avoid stiffness of the elbow. Some fixation devices may be too robust and technically difficult. We now report a technique which provides stable fixation of the pentalateral osteotomy, previously described (Laupattarakasem et al 1989). This allows immediate postoperative rehabilitation for adult patients.

Operative technique. The pentalateral osteotomy is performed as we described. The fragments are then fixed by two parallel Kirschner wires and a figure-of-eight tension-band wire passed through a drill hole in the proximal lateral cortex, to close the osteotomy gap. A malleolar screw is placed between the two wires and inside the tension-band loop to provide interfragmental compression (Fig. 1).

Patients and methods. From June 1988 to August 1991, we performed 61 corrective osteotomies for cubitus varus at Srinagarind Hospital, using pentalateral osteotomy with stable internal fixation. Twenty-six of the patients were over 15 years of age. The mean carrying angle on the normal side was 8.1° (SD 2.5) as against −18.7° (SD 6.7) on the affected side.
No external immobilisation was used for the 16 patients who did not need rotational correction (group A), and six of these who had limited elbow movement pre-operatively had immediate continuous passive motion for three days (Laupattarakasem 1988). For the other ten patients, in whom rotational deformities had been corrected, and who consequently had reduced opposing areas of bone, a posterior slab was applied for two weeks before active exercise was started (group B). Implants were removed after the osteotomy had completely healed at six months to one year postoperatively. One patient in group A sustained another fracture near the osteotomy in a car accident during the third postoperative week, and despite reoperation had a poor result. The other patients in both groups had regained ranges of elbow motion nearly equal to their pre-operative arcs by three months. Clinical evaluation using the criteria reported previously (Laupattarakasem et al 1989), showed nine excellent results (35%), 11 good (42%), four fair (15%) and two poor (8%).

Discussion. Stable fixation is the keystone to the success of corrective osteotomy for cubitus varus, especially in adult patients. Without this, progressive redisplacement is possible, with limitation of joint movement. Fixation by a pre-bent lateral plate and screws is difficult because of the short distal fragment, especially when correction of rotation is required. This reduces the area of contact between the osteotomy surfaces which are often shaped like a boomerang.

Even with this method of fixation, it is essential that early active exercise is very gentle and aimed at recovery of flexion rather than extension. The patient must also be warned not to put weight on the elbow before there is solid union.

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STRANGULATED OBTURATOR HERNIA MASQUERADING AS PAIN FROM A TOTAL HIP REPLACEMENT

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Strangulated obturator hernia is rare, but has a mortality of 10% to 20% (Hershman, Reilly and Swift 1986), partly because the diagnosis is made in only about 30% of patients before laparotomy (Gray et al 1974). Obturator hernia may present as pain in the thigh or the knee, and diagnosis may be delayed if the patient has previously had surgery on the hip on the same side.

Case report. An 81-year-old woman presented with acute onset of pain in the right leg and hip, ten years after a right total hip replacement and five years after its revision.

She was generally well, apyrexial but very thin, weighing only 32 kg. Her abdomen was soft and non-tender to palpation.

There was mild tenderness over the anterior aspect of the right hip, and movement was restricted by pain in all directions, but particularly on internal rotation. She also complained of pain over the right knee, but this showed no restriction of movement. Blood counts and serum biochemistry were normal, and radiographs of the