

Fracture of the neck of femur in childhood

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SUMMARY

Fractures of the neck of femur under the age of 14 years are so rare that few surgeons have much experience with them. Hamilton (1961) predicted that an orthopaedic surgeon would see one case in a lifetime, Quinlan et al (1980) reviewing the literature from 1885 when the first case was reported, say that it is 130 to 200 times less common than in adults. They found the largest personal series to be that of Lam (1971) in Hong Kong. Quinlan et al review 11 cases seen in Dublin over a period of 18 years, from 1958-77. They state that severe complications are likely in these children, especially avascular necrosis of the head of femur, non-union, coxa vara, and premature closure of the femoral epiphysis.

CASE REPORT

Edwin, a Zambian male child born on 1st June, 1971, the son of a miner was admitted to Wusikili Hospital on 17.3.80 after a fall from a tree. He had some minor lacerations of the chin and right foot, but his main complaint was severe pain in the right hip, and he was unable to put any weight on this leg. X-ray (Figs 1 and 2) shows a Type 3 (Delbet's classification, Colonna 1928) fracture of the base of the neck of femur with slight displacement on the lateral view.

He was put in 7lbs skin traction for 8 weeks, and discharged on 15.6.80 on crutches. Check X-ray (Figs 3 and 4) on 7.6.80 shows a well united fracture with no evidence of any complication.

Quinlan and his associates found that in their experience, the best results in these fractures occur from early operation and internal fixation. Ten out of eleven of their cases were treated in this way with various forms of pins and screws. Five of these developed complications later in spite of this.

Lam (1971) reviews 75 cases (though he includes those of 17 years of age as 'children') in a 10 year period in Hong Kong. He found that the

TABLE I

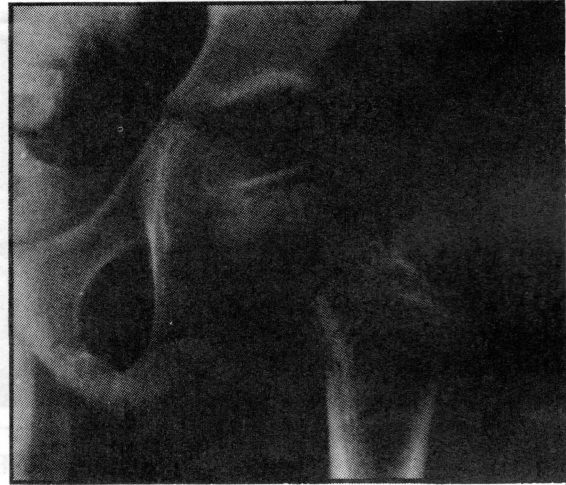


TABLE II

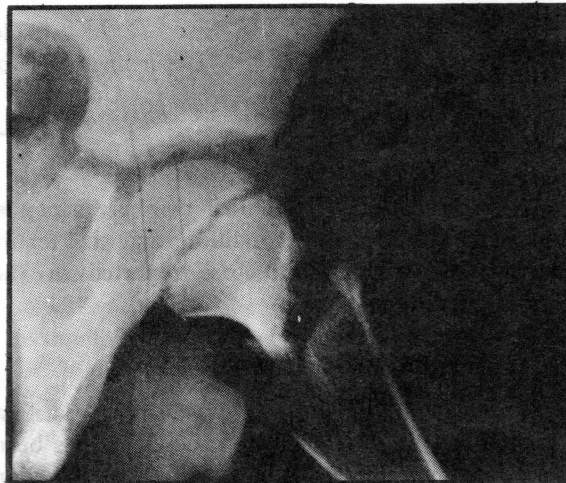
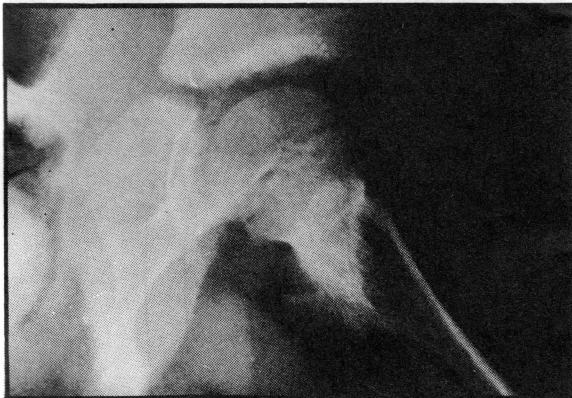


TABLE III



TABLE IV



majority of undisplaced transcervical and cervicotrochanteric fractures can be adequately treated conservatively. He remarks that displaced fractures remain an unsolved problem. He found an over-all incidence for avascular necrosis of 17%. Coxa vara was the commonest complication.

Fortunately in this case, there was minimal displacement, and simple immobilisation by skin traction was enough to produce a good result. A check will have to be made later for the possible development of avascular necrosis of the head of the femur.

ACKNOWLEDGEMENT

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