Introduction

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Femoral neck fractures in children are relatively infrequent Injuries as compared with femoral neck fracture in adult with osteoporotic bone [McDougal, 1961 , Ratliff , 1962 , Kay and Hall, 1971].

Femoral head and neck are dense and hard considerable Violence is required to produce a fracture, unless the femur is affected by some pathology [(Ingram , and Bachynski, 1935), (Carrell, 1941) and (Ratliff, 1962)].

Unlike adult, child's proximal femur has growth potential. If Capital femoral epiphysis is damaged; coxa vara may develop with further growth regardless excellence of reduction. Conversely if greater trochanter epiphysis is prematurely closed; coxa valga deformity may develop later. (Ingram and Bachynski, 1935)

The goal of treatment of displaced fractures is union in anatomical position with restoration of the neck-shaft angle (McDougal, 1961).

A common denominator in treatment schedules is the concern for appropriate immobilization of the displaced fractures. The Rule is to attempt gentle reduction followed by internal fixation [(Carrell, 1941), (Lam, 1971)]. If closed reduction fails, then open reduction is resorted to [(McDougal, 1961) , (Terrance et al., 1996)].

Internal fixation can be achieved by threaded moor's pins (Lam, 1971). Knowles pins (Ingram, and Bachynski, 1935) Kirschner wires (Canal, and Bourland, 1977) or AO cancellous screws [(Terrance, et al., 1996), (Mazhar, et al., 1998)].

On the other hand, non-displaced fractures can be treated non surgically using hip spica cast (Carrell , 1941) or traction [(Kay and Hall, 1971) , (Jack, 1999)].

However, some authors suggested internal fixation for all Fractures irrespective of the displacement [(Tachdjion, 1990), (Terrance et al., 1996) and (Mazhar, et al., 1998)].

The interest of this fracture is obviously not because of its frequency but

because of the frequency of complications which include: a vascular necrosis, non-union, malunion with coxa vara and premature epiphyseal fusion. More than one complication may be present in the same case because of the potential interrelationship [(Carrell, 1941) , (Garden, 1961), (McDougal, 1961) , (Ratliff, 1962) , (Ratliff, 1970) , (Weber, et al., 1980), (Kwang, et al., 2001) , (Morsy, 2001) and (Chladek and Trc, 2002)].

The aim of this study is review of literature as regard anatomy of proximal femur, ossification, biomechanics, incidence, mechanism of injury, fracture classification, fracture treatment and complications of femoral neck fracture in children.