
Management of congenital hip dysplasia in children above two years of age

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• Developmental dysplasia of the hip joint in children after the walking age presents by limping. • These cases should be properly diagnosed by plain radiography, sonography and C.T. scan. • They should be evaluated to detect the cause of instability. • The aim of management of DDH is early stable reduction and follow up of this stability. • Conservative treatment is not suitable for neglected DDH cases, operative management is the treatment of choice to achieve proper concentric stable reduction through:

- o Open reduction
- o Open reduction + pelvic osteotomy.
- o Open reduction + pelvic osteotomy + femoral shortening.

• Intraoperatively the following should be performed:

- o Proper assessment of position and stability after open reduction for evaluating the decision of pelvic or femoral osteotomy or both.
- o Proper non-aggressive dissection and capsular release
- o Avoidance of high tension of soft tissue on the femoral head by femoral shortening if needed to minimize the risk of avascular necrosis.
- o Proper stabilization and immobilization postoperatively for 3 months

• Using a muscle splitting approach and keeping muscles attached to the anterior iliac spines helps to adjust the muscle tension intra operatively as well as decreasing blood loss from the operation. This should decrease both the postoperative morbidity as well as the time needed for rehabilitation of the child after removal of plaster. • Using the autograft resulting from the femoral shortening into the acetabular osteotomy has the advantage of avoiding any limb "Shortening effect which could result from the femoral shortening osteotomy. • Postoperative Acetabular index, centre edge angle and intact Shenton line are the most important predictive factors to be looked for in intra operative and postoperative radiographs. • The worst complication in DDH treatment is avascular necrosis of the femoral head, and it never occurs in untreated cases. It may take up to twelve years post-treatment for avascular necrosis to appear and when it occurs, the affected hip usually ends by an unsatisfactory outcome. • Infection is a less common complication but has serious outcomes. Deep postoperative infection in children is difficult to detect and always should be suspected if early redislocation occurs in spite of good postoperative radiological parameters had been achieved.