SUMMARY

Septic arthritis of the hip joint, in general, is a rare disease. It affects neonates and infants more than older children or adults. After infection, the consequences on the hip joint function is widly varied but mostly unfavourable.

Our review of literature demonstrated the basic knowldge of the related hip joint anatomy and the pathogenesis of hip joint sepsis. We explained the predisposing factors for hip joint infection and how neonates in the incubators are more vulnerable to such affection. Also, we reviewed the most common organisms producing this lesion and the way of localization in the hip joint. We had also, explained the clinical manifestations of hip joint sepsis and the necessary investigations. We discussed the different planes of managment and lastly the prognosis and the complications encountered in this disease.

We studied 30 cases with early hip joint sepsis to evaluate the effect of early diagnosis and managment on the outcome of the hip joint function. All the cases were either neonates (within one month of delivery) or infants (under 2 years of age). The cardinal clinial manifestations are immobile limb (pseudoparalysis) with flexion attitude and painful passive movement. The clinical manifestations of hip joint sepsis were confirmed by X-ray and ultrasonsography of the hip joint. The most constant radiologic findings were lateral subluxation with increase in the joint space, and rarefaction. The hip ultasonography showed joint effusion in most of cases, and in rare occasions, partial head destruction. The laboratory

investigations (E.S.R, leukocytic count, blood culture) were quite unhelpful. Joint aspiration was very important as a diagnostic procedure and should be practiced widely. It helps confirming the diagnosis and yielding material for bacterial idintification and antibiotic sensitivity testing. Aspiration of 30 hip joints yeilded pus in 23 cases which had been drained. Early splintage in abduction using bilateral hip spica, Pavlik Harness or Von Rosen splint is very vital to overcome hip joint dislocation. The antibiotic chosen from the culture sensitivity report should be given in adequate dose parenterally for one week then orally for additional three weeks. The reduction of the head in the acetabulum is monitored by X-ray. The splintage is removed when the hip joint seems stable outside the harness. This usually takes 2-4 months.

Assesment of the results was done both clinically and radiologically. The parameters for satisfactory clinical function were: normal or good range of movement, no or insignificant shortening and absence of complications requiring subsequent surgical interference. At the end of follow up 17 cases (56.7%) were considered clinicaly satisfactory and, 13 cases were considered unsatisfactory due to the associated complications (dislocation, epiphyseal destruction, coxa vara, shortening or significant limitation of movement). The radiologic assesment showed satisfactory results in 18 cases (60.0%) with unsatisfactory results due to femoral head destruction or dislocation in 12 cases (40.0%). The most unsatisfactory outcome was encountered in cases with delay of managment more than seven days and the best results were acheived if diagnosis and treatment started within four

days of affection. Also, septic arthritis caused by staphylococcal organisms and arthritis associated with adjacent metaphyseal osteomylitis were proved to be of poor outcome. The use of early arthrotomy, adequate splintage in abduction for a sufficient length of time and proper parentral antibiotic are mandatory if satisfactory results to be acheived.