عنوان البحث:

Salter osteotomy combined with soft tissue release and drilling of the femoral head for the treatment of severe late-onset Perthes' disease

الملخص الانجليزى :

Numerous operative modalities have been anticipated for the management of Perthes' disease, but they have some essential complications. This study aimed to assess the clinical and radiological outcome of severe Perthes' disease presented at an age older than eight years and managed with Salter osteotomy associated with soft tissue release and femoral head drilling.

The study was conducted on 19 children (20 hips) with Perthes' disease from April 2017 to April 2021, with more than one-half femoral head envelopment. They were treated with the aforementioned technique. Clinical evaluation included: Harris hip score (HHS), hip range-of-motion (ROM), limb length discrepancy, and Oxford hip questionnaire for pain and function. Radiological results were assessed using Wiberg's center-edge angle, Sharp acetabular index, epiphyseal index, epiphyseal quotient, and Stulberg classification.

The study involved 14 males and five females, with a mean age of 9.3 years. The mean follow-up was 13 months. The mean Harris hip score was 87/100. The mean Oxford hip questionnaire score was 15.8/60. The mean Sharp acetabular index was 38°, while the mean CE angle was 39°. The mean epiphyseal index was 0.74, and the mean epiphyseal quotient for the 18 unilateral patients was 0.69. In the final examination, the Stulberg classification was type III for six hips and type IV for eight.

Salter osteotomy combined with soft tissue release and femoral head drilling can provide a good outcome for the management of severe late-onset Perthes' disease with symptomatic subluxated or deformed femoral head.