

CIRCULAR ACETABULAR OSTEOTOMY AND CUP IMPLANTATION IN POSTDYSPLASTIC HIP ARTHRITIS

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The authors report their own concept of the use of total hip replacement for the treatment of postdysplastic arthritis of the hip joint. The type and degree of deformity, the size and thickness of the acetabular bone mass, all those factors determine the proper course of implantation. In indicated cases, osteotomy of the acetabulum can be used, where the implantation of the component does not weaken the bottom of the acetabulum and will provide sufficient bone tissue for future reimplantation. A quite exceptional situation is the implantation of articular replacement in cases of high luxation, which will require a strictly individual solution for each patient.

Objective: Radiological and clinical evaluation of patients who underwent acetabular osteotomy during total hip arthroplasty (THA) for postdysplastic hip arthritis.

Methods: Acetabulum osteotomy was used to allow correct cup position and firm holding of acetabular component of THA in patients with severe postdysplastic acetabular bone defects. We conducted a prospective study evaluating patients who underwent acetabular osteotomy during THA. We collected data on demography, previous surgeries, range of motion and Harris hip score. We arranged CT scans in all patients preoperatively and also postoperatively.

Results: We performed 22 THA surgeries with additional acetabular osteotomy. We evaluated 8 patients in average age of 54. Six patients already underwent orthopedic surgery for hip dysplasia. We used spherical press-fit cups in all cases. Average postoperative Harris hip score is 79.5. We had to re-operate only one hip at once after surgery because of cup malposition.

Conclusion: Acetabular osteotomy during THA is quite rare indicated part of THA surgery and must be precisely planned preoperatively using CT scans. This surgery may assure firm holding of acetabular component especially among patients with severe postdysplastic acetabular bone defects. After 10 years, we haven't any case of loosening of the acetabular implant.

Biography

Jiri Stehlik finished his studies at the Charles University Medical School in 1977. At the Orthopaedic Clinic of the Charles University in Prague he worked for 22 years, in recent years as deputy head of the clinic. In 1994 he reached the scientific rank of CSc. (PhD.) and in 1996 the title of ass. Professor. From 2002 until last year he was the Head of the Orthopaedic Department of the Hospital in České Budějovice, the centre of South Bohemia. In total, he lectured 154 lectures, 16 of which were abroad, published 47 articles in professional journals and was the author or co-author of 5 monographs. In 2003 he was awarded Zahradnicek Award, for the best publication in Acta Chir. Orthop. Traum. Bohemian Society for Orthopaedics and Traumatology.

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