

## MEDIUM-TERM RESULTS OF CEMENTLESS TOTAL HIP ARTHROPLASTY OF THE DYSPLASTIC HIP

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**AIM:** THE STUDY PRESENTS OUR MEDIUM TERM RESULTS WITH TOTAL HIP ARTHROPLASTY OF THE DYSPLASTIC HIP USING CEMENTLESS PRESS-FIT AND THREADED ACETABULAR COMPONENTS.

**MATERIAL AND METHOD:** WE INCLUDED A NUMBER OF 228 PATIENTS (243 HIPS) WHO UNDERWENT CEMENTLESS TOTAL HIP ARTHROPLASTY IN OUR CLINIC BETWEEN JANUARY 2005 AND JANUARY 2010. PRESS-FIT ACETABULAR CUPS WERE IMPLANTED IN 195 OF THESE CASES, WHILE THE REST OF 48 CASES RECEIVED THREADED CUPS. MEAN FOLLOW-UP WAS OF 6.4 YEARS (RANGING BETWEEN 4 AND 9.2 YEARS). FOR CLINICAL FOLLOW-UP WE USED THE HARRIS HIP SCORE PREOPERATIVELY AND AT 3, 6 AND 12 MONTHS POSTOPERATIVELY, AND AT ANNUAL INTERVALS THEREAFTER. RADIOLOGICAL EXAMINATION WAS USED TO ASSES OSSEOINTEGRATION OF PROSTHESES AND TO HIGHLIGHT ANY SIGNS OF MOBILIZATION.

**RESULTS:** HIP DYSPLASIA WAS CLASSIFIED AS CROWE TYPE I IN 109 HIPS (44.86%), CROWE TYPE II IN 102 HIPS (41.98%), CROWE TYPE III IN 29 HIPS (11.93%) AND CROWE TYPE IV IN 3 CASES (1.23%). THE HARRIS HIP SCORE SHOWED IMPROVEMENTS IN ALL CASES, WITH NO STATISTICALLY SIGNIFICANT DIFFERENCES BETWEEN THE TWO TYPES OF ACETABULAR COMPONENTS. DURING THE FOLLOW-UP PERIOD WE OBSERVED RADIOLOGICAL SIGNS OF LOOSENING IN 5 CASES (2.05%), OF WHICH ONE WAS A CASE OF ACETABULAR COMPONENT MOBILIZATION, AND 4 CASES WERE FEMORAL STEM MOBILIZATIONS. IN ALL OF THESE CASES REVISION ARTHROPLASTY WAS PERFORMED.

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**CONCLUSIONS:** *ALTHOUGH THE DIFFICULTY OF TOTAL HIP ARTHROPLASTY IS INCREASED IN CASES OF HIP ARTHROSIS SECONDARY TO CONGENITAL HIP DYSPLASIA, WE OBTAINED GOOD AND VERY GOOD MEDIUM TERM RESULTS USING PRESS-FIT AND THREADED CEMENTLESS ACETABULAR COMPONENTS. WE NOTED NO SIGNIFICANT DIFFERENCES BETWEEN THE CLINICAL AND RADIOLOGICAL RESULTS OBTAINED FOR THE TWO TYPES OF ACETABULAR COMPONENTS USED.*

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**KEYWORDS:** ARTHROPLASTY, DYSPLASTIC HIP, PRESS-FIT, THREADED