Surgical Hip Dislocation of Femoroacetabular Impingement: Survivorship and Functional Outcomes at 10 Years

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Abstract: Aims: Femoroacetabular impingement (FAI) was first recognised as a potential driver for hip pain at the turn of the last millennium. While there is an increasing trend towards surgical management of FAI by arthroscopic means, open surgical hip dislocation and debridement (SHD) remains the Gold Standard of care in terms of reported outcome measures. (1) Longterm functional and survivorship outcomes of SHD as a treatment for FAI are yet to be sufficiently reported in the literature. This study sets out to help address this imbalance. Methods: We undertook a retrospective review of our institutional database for all patients who underwent SHD for FAI between January 2003 and December 2008. A total of 223 patients (241 hips) were identified and underwent a ten year review with a standardised radiograph and patient-reported outcome measures questionnaire. The primary outcome measure of interest was survivorship, defined as progression to total hip arthroplasty (THA). Negative predictive factors were analysed. Secondary outcome measures of interest were survivorship to further (nonarthroplasty) surgery, functional outcomes as reflected by patient reported outcome measure scores (PROMS) scores, and whether a learning curve could be identified. Results: The final cohort consisted of 131 females and 110 males, with a mean age of 34 years. There was an overall native hip joint survival rate of 85.4% at ten years. Those who underwent a THA were significantly older at initial surgery, had radiographic evidence of preoperative osteoarthritis and pre- and post-operative acetabular undercoverage. In those whom had not progressed to THA, the average Non-arthritic Hip Score and Oxford Hip Score at ten year follow-up were 72.3% and 36/48, respectively, and 84% still deemed their surgery worthwhile. A learning curve was found to exist that was predicated on case selection rather than surgical technique. Conclusion: This is only the second study to evaluate the long-term outcomes (beyond ten years) of SHD for FAI and the first outside the originating centre. Our results suggest that, with correct patient selection, this remains an operation with worthwhile outcomes at ten years. How the results of open surgery compared to those of arthroscopy remains to be answered. While these results precede the advent of collison software modelling tools, this data helps set a benchmark for future comparison of other techniques effectiveness at the ten year mark.

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