

A 20 YEAR STUDY OF CLINICAL AND RADIOLOGICAL OUTCOME OF DEVELOPMENTAL DYSPLASIA OF HIP (DDH) SURGERY

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Introduction: Developmental dysplasia of hip (DDH) is commonly managed in a tertiary centre and often involves surgical treatment. Studies on surgical outcome of DDH especially long-term research are lacking in our local setting. The aim of this study is to determine the surgical outcome of DDH patient treated in our centre from January 1996 to January 2018.

Methodology: One hundred and two DDH patient's records were retrospectively reviewed. Patients were divided based on the surgical treatment received; either closed reduction with or without adductor tenotomy (Group A), open reduction and hip spica (Group B) or open reduction and additional bony procedure (Group C). Modified McKay Classification and Severin classification were used to evaluate the clinical and radiological outcome. An objective radiological assessment (Omeroglu classification) was also utilized. Data on post-operative complications were recorded.

Discussion: A total of 102 patients (123 hips) were reviewed with the mean age of 11.9 ± 0.6 years at the last follow-up. Mean duration of follow up was 9.0 ± 5.7 years. Each group achieved more than 60% excellent/good clinical outcome (87% Group A, 66.7% Group B, 64.2% Group C). Meanwhile Severin classification revealed satisfactory radiological outcome in 60.9% Group A, 66.7% Group B and 68.6% Group C. However, radiological classification system by Omeroglu showed only 25.0% satisfactory outcome in group A, 34.8% in Group B and 41.8% in group C. No significant differences were found among the three groups for the clinical and radiological outcome. The common post-operative complications seen were re-dislocation or subluxation (21.5%) and Avascular Necrosis (43.1%) but majority is Grade I/II.

Conclusion: Our review revealed a modest mid-term outcome of children treated for DDH. A successful treatment with closed reduction only produced the highest proportion of good clinical outcome. Omeroglu radiological classification system showed a less optimistic results.