Surgical Release of Gluteal Fibrosis in Children Results in Sustained Benefit at 5-Year Follow-up

Authors: Reilly, Amanda L. [1]; Owori, Francis R. [2]; Obaikol, Ruth [3]; Asige, Elizabeth [4]; Aluka, Harriet [4]; Penny, Norgrove [5]; Olupot, Robert [4]; Sabatini, Coleen S. [6];
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Background:

Gluteal fibrosis (GF) is a fibrotic infiltration of the gluteal muscles resulting in functionally limiting contracture of the hips and is associated with injections of medications into the gluteal muscles. It has been reported in numerous countries throughout the world. This study assesses the 5-year postoperative range of motion (ROM) and functional outcomes for Ugandan children who underwent surgical release of GF.

Methods:

A retrospective cohort study of children who underwent release of GF in 2013 at Kumi Hospital in Eastern Uganda. Functional outcomes, hip ROM, and scar satisfaction data were collected for all patients residing within 40 km of the hospital.

Results:

One hundred eighteen children ages 4 to 16 at the time of surgery were treated with surgical release of GF in 2013 at Kumi Hospital. Of those 118, 89 were included in this study (79.5%). The remaining 29 were lost to follow-up or lived outside the study's radius. Detailed preoperative ROM and functional data were available for 53 of the 89 patients. In comparison with preoperative assessment, all patients postoperatively reported ability to run normally (P<0.001), sit upright in a chair (P<0.001), sit while eating (P<0.001), and attend the entire day of school (P<0.001). Passive hip flexion (P<0.001) improved when compared with preoperative measurements. In all, 85.2% (n=75) of patients reported satisfaction with scar appearance as "ok," "good," or "excellent" 29.2% (n=26) of patients reported back or hip complaints.

Conclusions:

Overall, the 5-year postoperative outcomes suggest that surgical release of GF improves ROM and functional quality of life with sustained effect.

Level of Evidence:

Level IV—case series.

Keywords: Uganda; fibrosis surgery; gluteal fibrosis; injection injury; pediatric hip contracture; treatment outcome

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Affiliations: **1:** School of Medicine **2:** Busitema University Faculty of Health Science, Mbale **3:** Uganda Christian University School of Medicine, Kampala **4:** Kumi Hospital, Kumi, Uganda **5:** University of British Columbia, Vancouver, BC, Canada **6:** Department of Orthopaedic Surgery, University of California San Francisco, San Francisco, UCSF Benioff Children's Hospital Oakland, Oakland, CA

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