

Reduction clitoroplasty by clitoral disassembly as an approach for the treatment of congenital adrenal hyperplasia

European Urology Supplements 2019;18(2):e2360

Stojanovic B.¹, Bizic M.², Bencic M.¹, Vukadinovic V.², Korac G.³, Djordjevic M.²

¹University Children's Hospital, Dept. of Urology, Belgrade, Serbia, ²University Children's Hospital, Faculty of Medicine, University of Belgrade, Dept. of Urology, Belgrade, Serbia, ³University Children's Hospital, Dept. of Anesthesiology, Belgrade, Serbia

Introduction & Objectives: The treatment of congenital adrenal hyperplasia (CAH) is multidisciplinary, and cooperation of a neonatologist, pediatric endocrinologist, pediatric urologist and pediatric psychologist is necessary for successful outcome. The aim of clitoral surgery is to achieve typical clitoral anatomy without compromising sensation and sexual pleasure in the future.

Materials & Methods: From March 2007 until March 2017, 11 patients with CAH, aged from 1 to 12 years (mean 3.5 years), underwent reduction clitoroplasty together with urethroplasty and introitoplasty. Surgical treatment included complete disassembly of the clitoris into glans with neurovascular bundle and urethral plate and cavernosal bodies. Degloving of the clitoris begun with circumferential incision line about 1cm under the corona level. Neurovascular bundle was dissected from the corpora cavernosa with caution to preserve its' structures. Glans cap was then separated from the tips of the cavernosal bodies, avoiding the injury of arteries. Maximal reduction of cavernosal bodies and glans reduction were performed, followed by glans reconstruction and reassembly of all entities, in order to attain characteristic clitoral morphology. It is very important to maximally reduce cavernosal bodies and prevent postoperative pain related to cavernosal remnants.

Results: Follow-up ranged from 24 to 144 months. A satisfying aesthetic outcome with normal appearance of the clitoral glans was achieved in all cases. Sensitivity of the reduced clitoris seemed preserved in all patients, but complete assessment was impossible due to the patients' age.

Conclusions: Clitoral disassembly followed by reduction clitoroplasty presents a good choice for clitoromegaly in patients with CAH. This approach leaves the neurovascular bundle intact and completely preserves the glans cap and urethral plate blood supply. It also prevents pain due to erection of cavernosal bodies' remnants during the arousal. Long-term follow-up and psychosexual assessment is necessary for evaluation of sensation and sexual function in these patients.