

PP-23 Urethral Diverticulum Complicating Hypospadias Surgery

Poster Bildiri

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INTRODUCTION: Urethral diverticulum infrequently occurs as a complication in hypospadias repair and may induce several complaints such as incomplete voiding and dribbling after voiding. The reported incidence is 0-21%. It nearly always accompanies proximal defects while distal stricture after surgery seems to be the main cause. **PATIENTS AND METHODS:** Medical records of 674 hypospadias patients treated at our institution between 2011 and 2023 are evaluated retrospectively. The patients who have developed postoperative urethral diverticulum are analyzed. Patient demographics, clinical properties, management and outcomes were documented. **RESULTS:** Urethral diverticulum were developed in 6 patients with an incidence of 0,9%. The type of hypospadias was penoscrotal in 5 patients and perineal in one. The mean age of the patients at first operation and at the time of diverticulum repair was 8 months and 4,1 years respectively. Five patients had their primary repair at our institution and one patient was referred from another clinic. All patients had severe chordee and penoscrotal transposition which all needed to be corrected before planned surgery. Staged repair was performed in 5 patients and island tube urethroplasty in one. The number of mean surgical procedure was 6 including chordee and transposition correction, urethroplasty procedures and complication surgeries. Stricture at the level of glandular urethra was the cause of diverticula in all patients in conformity with incomplete voiding, difficulty in voiding and postvoiding dribbling complaints. Excision of the redundant tissue, urethroplasty and covering the anastomosis with available adjacent vascularized tissue was performed in all patients; subsequent fistula repair was done in two patients. Mean follow-up of the patients are 41 months after diverticula repair and no additional complications occurred. **CONCLUSION:** We hypothesized that the main causes of diverticulum formation are lacking of spongy tissue to support the neourethra, long urethroplasty and distal obstruction due to stiffly distal glandular urethra. Excision of the redundant tissue with multilayer repair seems to be enough and efficient. It is essential in proximal hypospadias repair to constitute an adequate neourethra to avoid additional complications and surgeries.

Keywords: hypospadias, complication, urethral diverticulum