## Assessment of the Function of Lower Urinary Tract Following Feminizing Genitoplasty in Females with Congenital Adrenal Hyperplasia



Shaymaa Elsayed (1), Ehsan Wafa (1), Haytham El Mitwally (2), Yousra Yousry (1) <sup>(1)</sup> Pediatric Endocrinology and Diabetology Unit, Faculty of Medicine, Alexandria University, Egypt. <sup>(2)</sup> Genitourinary Surgery department, Faculty of Medicine, Alexandria University, Egypt.



virilized females with Congenital

• The mean age of the cases was 8.2 years with mean duration of CAH of 7.9 years.

Results

**Comparison of different variables** between cases of CAH and controls

Adrenal Hyperplasia (CAH), the principal aims of surgery are to reduce the size of clitoris, create a vaginal orifice that will allow menstrual flow and intercourse, and to correct the urogenital sinus to prevent incontinence.

• The complications Feminizing of Genitoplasty include urinary complications as regards the voiding function and continence.

• Symptoms of voiding dysfunction include dysuria, urgency, and frequency. The dysfunctional voiding scoring system may help to identify patients with postoperative urinary complications.



were controlled on medical • 67.5% treatment and 80% had done surgical correction in one stage operation.

• By applying the dysfunctional voiding score system, 72.5% of cases had score  $\leq 6$  and there were 11 cases (27.5 %) had score > **6**.

• There were 7 cases (out of 11 with high score) had Bell shaped curve on Urodynamic study, 3 cases with Interrupted curve and only one case with Plateau curve. There were 9 patients improved after toilet training.

	No.	%
<b>Toilet training</b>		
Refused	1	9.1
Improved	9	81.8
Not improved	1	9.1
Shape of curve		
Bell shape	7	63.6
Plateau	1	9.1
Interrupted	3	27.3
Assessment of		
external sphincter		
Normal	10	90.9
Increase activity	1	9.1
<b>Cosmetic Genital</b>		
appearance		
Good	4	36.4
Satisfactory	4	36.4
Poor	3	27.3

• To assess the function of lower urinary tract following Feminizing Genitoplasty in females with CAH.



• We included 40 female children with CAH aged more than 3 years attending the Endocrinology clinic in Alexandria University Children's Hospital, Egypt.

• Thorough history taking and clinical examination were done with emphasis on age at diagnosis and duration of disease, timing and stages of surgery, and presence of urinary symptoms.

## **Total score and severity of cases of CAH**

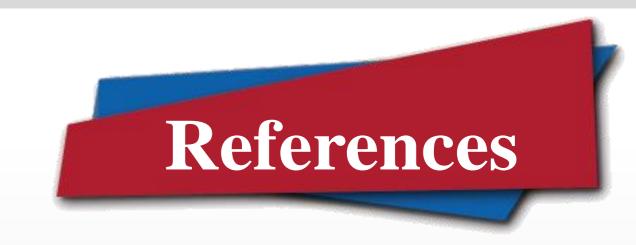
Total score	Min. –Max.	Mean ±SD.
	10 150	<b>4.57</b> ±
	1.0 – 15.0	3.73
Score severity	No.	%
Less than or equal 6	29	72.5
More than 6	11	27.5

## **Cases with High Score (n=11)**

	No.	%	
Age (years) Mean ± SD.	9.0 ± 2.4		
Age at diagnosis (Months) Mean ± SD.	<b>4.9</b> ± 14.5		
Duration of illness (years) Mean ± SD.	$8.5 \pm 2.2$		
Controlled			
Yes	7	63.6	
No	4	36.4	



• Lower urinary tract symptoms are common in females children with CAH after Feminizing Genitoplasty so early assessment is needed to prevent urinary complications.

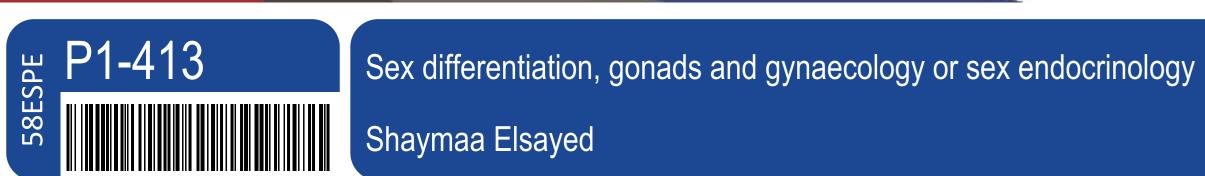


• Davies MC, Crouch NS, Woodhouse CR, Creighton SM. Congenital adrenal hyperplasia and lower urinary tract symptoms. BJU Int 2005; 95(9):1263-6.



• Assessment of lower urinary tract function using dysfunctional voiding score system was done for them at least 6 months after the Urodynamic evaluation surgery. was performed for females with score more than 6.

•Farhat W, Bägli DJ, Capolicchio G, O'Reilly S, Merguerian PA, Khoury A, et al. The dysfunctional voiding scoring system: quantitative standardization of dysfunctional voiding symptoms in children. J Urol 2000; 164(3):1011-5.



Poster presented at:



