PENILE & GLANS SIZE: DOES IT MATTER IN HYPOSPADIAS REPAIR?

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Purpose: There are no reports of systematically measured penile and glans dimensions in boys with different grades of hypospadias. To determine the impact of the penis Length (PL) and glans dimensions on the functional and cosmetic outcome of hypospadias repair, we prospectively measured PL and 3 dimensions of the glans before and after hypospadias repair and evaluated the outcome.

Methods: The penile length(PL), the Dorsal Vertical Length (DVL), the Ventral Vertical Length (VVL) of the glans and the maximum Glans Width(GW) were prospectively measured in boys admitted for hypospadias repair. The 3 glans dimensions were measured again 6 months after surgery and results were documented. Mean follow up was 15 months (range 6-32).

Results: 679 boys were referred with hypospadias, 80 boys had complicated hypospadias and were excluded. The mean age was 12 months (range 6-34). They were 147 glanular, 283 distal, 123 proximal and 46 perineal Hypospadias. The DVL was equal to the GW in 569 cases (95%). GW was classified into 3 groups: A: 16-18mm, B: 13-15mm and C:10-12 mm. VVL was classified into 2 groups: I: more than 6 mm and group II 6 mm or less. 16% of glanular hypospadias, 16% of distal, 30% of proximal and 48% of perineal hypospadias belonged to GW group C (10-12mm) and VVL group II (less than 6mm, table).

Conclusion: The PL and dimensions in proximal hypospadias were statistically different from that in distal forms. The VVL was half that of DVL. The DVL was equal to the GW. DVL and GW were half the PL in the majority of cases and control. There was a direct relation between the severity of the hypospadias with the GW and VVL. Boys with VVL less than 6 mm had significantly less satisfactory cosmetic results and were more liable complications p< 0.05).

Table II (VV)			
Table II: Ventral Vertical Length (VV) in 353 patients with hypospadias		gth (VVL) in 599 patients with hypospadias	
HS Grade	Ventral Vertical (VV) Length		
	total number of patients	>6mm	< 6 mm
I	147	124	2316%
II	283	237	4616%
III	123	87	3630%
IV	46	24	2248%

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