The Spontaneous Descent Rate of Undescended Testes

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Introduction:

Standard teaching states that 70% of cryptorchid testes will spontaneously descend. Based on this belief, the decision to perform corrective surgery (orchiopexy) is often deferred during infancy. Recent studies have suggested a lower descent rate. It is proposed that current clinical practice has led to orchiopexies being performed after the recommended age of 12 months.

Aims:

To document the spontaneous testicular descent rate in cryptorchid boys in Cork, and determine the age at which orchiopexies were performed on the testes which did not descend.

Methods:

All boys diagnosed with cryptorchidism at their newborn examination (before the onset of the cremasteric reflex) in Cork University Maternity Hospital between January 2009 and December 2012 were included (n=159). The hospital records of these boys were reviewed and the outcome regarding testicular descent or surgery was recorded. Infants were split into 3 groups: full term, premature and syndromic.

Results:

135 children had unilateral cryptorchidism, and 31 children had bilateral cryptorchidism which meant 197 undescended testes in total were included in our study. 82 out of 197 (42%) testes in total spontaneously descended. There was a statistically significant association between unilateral or bilateral cryptorchidism and spontaneous descent ($p = 0.001$, x^2). No such association was found between full term, preterm and syndromic testes ($p = 0.057$, x^2). The mean age at orchiopexy was 25.4 months (SD = 10.2). Only 5 of the 102 (5%) children requiring an orchiopexy were operated on before the recommended 12 months. Results are summarised in *tables 1 and 2.*

Table 1. Descent Rates

Group	Spontaneously descended	Descent rate %	p-value
Total			
Total descent rate	82/197	42%	
Group			
Full term	65/155	42%	
Premature	16/32	50%	0.057
Syndromic	1/10	10%	
Laterality			
Unilateral	43/135	32%	0.001
Bilateral	39/62	63%	

Table 2. Age at orchiopexy

Age at orchiopexy	Number (n=102)	%
< 12 months	5	5%
12-24 months	47	46%
25-36 months	28	27%
>36 months	22	22%

Conclusions:

We found newborn undescended testes had a lower spontaneous descent rate than previously reported. The majority of orchiopexies in Cork are being performed after the recommended age of 12 months. We now refer cryptorchid children to urology services at time of diagnosis to facilitate earlier surgery.