

**DOES EARLIER ORCHIDOPEXY AFFECT TESTICULAR ATROPHY? RESULTS FROM THE ORCHESTRA STUDY**

Clare Skerritt<sup>1,6</sup>, Catherine Bradshaw<sup>2,6</sup>, Nigel Hall<sup>5,6</sup>, Mark Woodward<sup>3</sup>, Liam McCarthy<sup>4</sup>, Paediatric Surgical Trainee Research Network PSTRN<sup>6</sup>

<sup>1</sup>Evelina Children's Hospital, London, UK, <sup>2</sup>Oxford Children's Hospital, Oxford, UK, <sup>3</sup>Bristol Children's Hospital, Bristol, UK, <sup>4</sup>Birmingham Children's Hospital, Birmingham, UK, <sup>5</sup>Southampton Children's Hospital, Southampton, UK, <sup>6</sup>Paediatric Surgical Trainee Research Network, PSTRN, UK

**Aims of the study:** In September 2011 the British Association of Paediatric Urologists wrote a consensus statement recommending that orchidopexy should be performed from as early as 3 months of age although between 6 and 12 months is acceptable. It is not known whether operating at earlier age may affect the rate of post-operative testicular atrophy following orchidopexy. The ORCHESTRA study aimed to establish current practice with regards to the age at orchidopexy in a multicentre, international audit and determine the testicular atrophy rate post surgery at > 6 months follow-up.

**Methods:** The audit was performed over a 3 month period in 28 centres in boys undergoing orchidopexy for unilateral, palpable undescended testes. Data were collected prospectively using a standardized, pre-determined protocol and secure online database entry. The primary outcome was post-operative testicular atrophy. Secondary outcomes were rate of re-operation/ testicular ascent, wound infection rates and anaesthetic complications/ overnight stays.

**Main Results:** 413 patients were included with complete follow-up on 332 patients (80%). Only 12% of orchidopexies were performed in boys under 1 year of age. There was no difference in the atrophy rate in < 1yrs (2.6%) versus > 1 yrs (3.1%). Fisher's exact test  $p > 0.99$ . See table 1. There was no difference in rates of testicular ascent (< 1yrs 0 vs >1yrs 2.7%) or anaesthetic complications (<1yrs 0 vs >1yrs 1.3%). There was a significantly higher rate of wound infection in <1 yrs (10.5%) versus > 1 yrs (2.4%), Fisher's exact test  $p = 0.03$ .

**Conclusion:** We have not shown an increased risk of post-operative testicular atrophy for early surgery although there is a higher rate of wound infection. Only 1 in 8 boys receive orchidopexy before 1 yrs. Further study is required to demonstrate that early orchidopexy is not inferior to orchidopexy at > 1yrs.