

# ORCHESTRA

**Background:** In September 2011 the British Association of Paediatric Urologists wrote a consensus statement including the recommendation that orchidopexy should be performed from as early as 3 months of age although between 6 and 12 months is acceptable. However it is not known whether operating at earlier age may affect the rate of testicular atrophy following orchidopexy. It is also not known whether current referral patterns would permit such early intervention.

**Aim:** To establish the testicular atrophy rate at 6 to 12 months following surgery and to define current practice with regards to the age at orchidopexy in a multicentre international audit.

**Endpoints:**

- 1) Rate of testicular atrophy
- 2) Rate of re-operation/ testicular ascent
- 3) Wound infection rates
- 4) Anaesthetic complications/ overnight stays

**Hypothesis:** Reducing the age at orchidopexy may affect the rate of testicular atrophy following surgery.

**Standards:** Currently accepted rate of atrophy is 5% for single stage orchidopexy. (1)

**Sample Size Calculation:** To detect an increase in atrophy to 10%. Power 0.8, alpha 0.05 will require 185 patients in each of two groups (to detect increase in atrophy to 8% sample size would be 478 in each group):

1. Age at orchidopexy < 1yr
2. Age at orchidopexy >1 yr

We aim to recruit 400 children in this study.

**Methods:** The audit will be performed over a 3 month period. Participation from at least 10 paediatric surgical centres and 20 district general hospitals performing general surgery of childhood is estimated to recruit 400 patients. The audit will be performed using a standardised pre-determined protocol and online data collection tool. The audit standards are taken from published literature including: <5% atrophy rate post orchidopexy, < 2% testicular ascent requiring re-operation, < 2% wound infection rate, <2% overnight stay following planned daycase surgery. The audit report will be prepared in accordance to guidelines set by the STROBE statement for observational studies.