

# RETRACTILE TESTES

A review of the current literature

UROLOGY DEPARTMENT

CHILDREN'S HOSPITAL NO.2

# Definitions

- ▶ Normal size
- ▶ Intermittently resides in the groin
- ▶ Testes that can be brought down into their normal position in the scrotum
- ▶ Remains there for a period

# Aetiology

- ▶ Variant of normal
- ▶ Strong cremasteric reflex
- ▶ Taut spermatic cord in a testis which is in the process of ascending

# Clinical examination

- ▶ Supine
- ▶ Manipulate the testis to the base of the scrotum
- ▶ Release to observe whether it remains there or moves back up into the groin

# OUTCOME OF RETRACTILE TESTES

- ▶ Acquired undescended testes
- ▶ Acute torsion
- ▶ Reduced fertility
- ▶ Tumour risk

# Acquired undescended testes

- ▶ La Scala & Ein reviewed 150 boys with 205 retractile testes with a 7-year follow-up period → 23% of retractile testes eventually becoming an acquired UDT [1]
- ▶ Agarwal et al. a cohort of 122 boys with 204 retractile testes over 8 years of follow-up: 32% of retractile testes eventually becoming acquired UDT [2]
  - *cord tautness as a risk for ascent*
- ▶ Stec et al. looked at the outcome of 172 boys with 274 retractile testes over a follow-up period of 26 months → 7% acquired UDT [3]
- ▶ Limited: definition, indication of orchidopexy, short follow-up periods

# Acute torsion

- ▶ Only an isolated case report of this within the literature (Charles JC. The fate of the retractile testis. J Urol 2004;171:1237) [4]
- ▶ Retractable testes are no increased risk for acute torsion over normal testes

# Tumour risk

- ▶ Congenital UDT have an increased relative risk of germ cell malignancy that may be approximately 5-10 times [5]
- ▶ Acquired UDT do not have an increased risk of malignancy [6]
- ▶ → retractile testis per se is not at an increased relative risk of developing a cancer



# Reduced fertility

- ▶ Caucci et al. sperm counts in semen of 38 young male adults treated for retractile testes before puberty and 7 adults with retractile testes
  - normal semen analysis: 21% in young adults with previously treated retractile testes, 29% in adults with retractile testes
  - retractile testes with reduced size are a risk factor for male infertility [9]
- ▶ Other epidemiological studies of infertile adult males have identified retractile testes as being associated with lower sperm counts and hypospermatogenesis on biopsy[10-12]
  - increase in testicular temperature resulting in impaired spermatogenesis [12]

# Reduced fertility

- ▶ Puri and Nixon assessed paternity rates in 43 adult males who as children had bilateral retractile testes: 74% of the subjects had fathered children and that testicular volumes were normal
- ▶ retractile testes develop normally with no harmful effects on fertility [13]
- ▶ Dadfar MR performed orchidopexies on 22 adult males with idiopathic infertility and bilateral retractile testes, and measured their testicular volumes and sperm parameters after 1 year: no change in testicular volume and sperm density, but improved sperm motility [14]
- ▶ Limited: not established paternity, not performed semen analysis

# Conclusion

- ▶ Retractable testis may become an ascended testis: Level 4 evidence
- ▶ Acute torsion: no evidence
- ▶ Tumour risk: no evidence
- ▶ Reduced fertility: poor evidence
- ▶ Not enough evidence to warrant orchidopexy on a retractile testis
- ▶ But recommend annual clinical surveillance of retractile testes until beyond puberty
- ▶ And reserve orchidopexy for testes which can no longer be brought down into the scrotum (ascended testes)

**Thank for your attention!**

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