When should a child with an undescended testicle be referred to a urologist?

Evidence-Based Answer

Urology referral for surgical intervention should occur between 6 and 12 months of age, because spontaneous descent after 6 months is rare and surgery should be performed before 12 months of age to optimize future fertility (SOR: C, guideline and disease-oriented evidence). Children diagnosed after this time should still be referred for surgery to decrease cancer risk (SOR: B, guideline and cohort study).

In a study of 155 boys with unilateral cryptorchidism diagnosed by 6 months of age, researchers randomized patients to orchiopexy at 9 months or at 3 years of age. In the early surgery group, testicular volume increased from 0.35 mL at 6 months of age to 0.50 mL at 4 years of age (P<.001), whereas there was no statistically significant growth in the late surgery group (from 0.35 to 0.38 mL; no P value given). The between-group difference was statistically significant at 4 years of age (P<.001).

A retrospective cohort study included nearly 17,000 Swedish men diagnosed with cryptorchidism and treated with orchiopexy before 20 years of age between 1964 and 1999, identified through public hospital records. Men were followed for an average of 12 years. Fifty-six testicular cancers were diagnosed and the hazard ratio for testicular cancer in men who had orchiopexy at or after 13 years of age was 2.0 (95% CI, 1.0–4.0) compared with men who had orchiopexy before 13 years of age.

A panel of experts from the Nordic countries published a consensus guideline on the treatment of undescended testes. Specialists in testicular physiology, pediatric surgery/urology, endocrinology, andrology, pathology, and anesthesiology reviewed the literature and held a 2-day meeting to arrive at a consensus on several management issues using literature reviews.

Based on unreferenced data indicating a high rate of spontaneous descent in the first few months of life, the guideline recommended waiting until 6 months before referring for urological surgery. The guideline further recommended surgery by 1 year of age based on the RCT referenced above. The guideline also cited observational studies showing histological changes occurring in undescended testes after 1 year of age. This guideline did not provide strength of recommendation indicators.

A working group of members from the European Society for Pediatric Urology and the European Association of Urology published guidelines for cryptorchidism based on a systematic Medline literature search and expert consensus that was evaluated by blinded peer review. The guideline recommended surgical treatment be performed before 12 to 18 months of age, based on observational studies showing histological changes in undescended testicles after this time period. If diagnosis is not made by this age, the guideline still recommends surgery as early as possible to decrease the risk of testicular cancer based on the cohort study referenced above. Strength of recommendation indicators were not given.

Laura DuChene, MD
Thomas Satre, MD
U of MN/St. Cloud Hospital FMR
St. Cloud, MN


Does topical antibiotic treatment improve cure rates for bacterial conjunctivitis?

Evidence-Based Answer

Yes. Although bacterial conjunctivitis is associated with a high rate of spontaneous resolution, antibiotic treatment improves clinical and microbiologic cure rates of this acute infection (SOR: A, consistent meta-analyses).

A 2011 meta-analysis examined 3 RCTs (622 adults and children) conducted in the primary care setting that compared topical antibiotics with placebo or no treatment for acute bacterial conjunctivitis. The investigators pooled patient level data to determine clinical cure as assessed by patients or physicians. The antibiotics studied were chloramphenicol eye drops 0.5% (1 drop 4 times a day) and fusidic acid gel 0.1% (1 drop 4 times a day).

At 7 days, 80% (246 of 308) of the patients who received antibiotics and 74% (233 of 314) of the patients who received placebo or no treatment were cured (risk