

NONSURGICAL THERAPY FOR UNDESCENDED TESTIS

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Success rates of hormonal therapy vary between 10% and 50% (1). The possible reason for this high difference is that while success is high in cases of ascending testis or retractile testis, these rates are low in cases of true undescended testes. These rates vary between 6-21% in studies performed by excluding retractile testes (1). Hormone therapy is based on the presence of androgen deficiency in the etiopathogenesis of undescended testis. Therefore, various agents such as human chorionic gonadotropin (hCG), gonadotropin releasing hormone (GnRH) or luteinizing hormone (LHRH) and Buserelin which increase testosterone production, are used in the treatment. Since local high-dose testosterone levels stimulate testicular descent, systemic testosterone use is ineffective and therefore not used.

Routine administration intramuscularly 250 IU/dose for infants younger, 500 IU/dose up to 6 years of age, and 1000 IU/dose over 6 years of age, twice a week for 5 weeks (International Health Foundation). Therapeutic dose of hCG is 1500 units per square meter of body surface area twice a week for 4 weeks. A typical course of GnRH therapy consists of 1.2mg/day, in divided doses, for 4 weeks. Buserelin, a synthetic LHRH superanalogue, is administered 10 µg every other day for 6 months (2). A testicular descent rate of 25% is achieved with hCG, 18% with GnRH and 17% with Buserelin (3).

Side effects of hormonal therapy include scrotal wrinkling and pigmentation, pubic hair growth, frequent erections and penile growth, aggressive behavior

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chidopexy. Buserelin may also improve germ cell histology and spermiograms obtained after spontaneous descent or orchiopexy (7,8).

After successful therapy, the patient should be re-examined periodically, because approximately 15% of successfully treated testes reascend (2,9). If a course of medical therapy is unsuccessful, an additional course with the same or another agent is not likely to be beneficial. The overall efficacy of medical treatment in cryptorchid boys is less than 20% and significantly depends on the pretreatment testicular location (10). Surgery remains the gold standard.

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