

The incidence of cryptorchidism

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The incidence of cryptorchidism in normal full-term newborns is about 3.4% and present in 0.7% of children after 1 year of age and in adults, whereas in PWS it is present in 88%. Spontaneous testicular descent is unlikely to occur after the age of 1 year in PWS and non-PWS children. Patients with untreated intra-abdominal cryptorchidism or those who underwent surgical correction during or after puberty may have increased risk to develop testicular tumors. The gonadotropins are important during the 3rd trimester of gestation for testicular descent and production of sex hormones for further enlargement of the penis. Low concentration of gonadotropins may explain the undescended testicles and small genitalia characteristic of PWS individuals. Hormonal treatment with human chorionic gonadotropins (hCG) or luteinizing hormone releasing hormone (LH-RH) is effective in about 30% of those children with true undescended testicles. Medical management does not replace surgical intervention but a course of hCG might facilitate surgery for undescended testicles and circumcision. Testosterone concentration increases after hCG treatment and it may help to increase the size of penis and scrotum as well as to improve the low muscle tone and mass. Medical management before surgery seems to be most appropriate in children with PWS with undescended testicles.