FREQUENCY OF CRYPTORCHIDISM AND AGE AT SURGERY IN HELSINKI AREA 2004 - 2014

BACKGROUND

Cryptorchidism is a known risk factor for testicular cancer and poor semen quality (1). The incidence of cryptorchidism has been lower in Finland than in the other Nordic countries (2,3). Nordic consensus on treatment of undescended testes, released in 2007, stated that orchiectomy should be done between 6 and 12 months of age, or upon diagnosis, if that occurs later (4).

![Graph showing frequency of referrals and age at operation](image1)

**Figure 1**: Patients sent to the Helsinki Children’s Hospital for evaluation of unilateral, bilateral or undefined cryptorchidism (n=1214) annually.

**Figure 2**: Age at bilateral orchiectomy: patients operated on (n=136) between 2004-2007 vs. 2008-2014.

OBJECTIVES

- To investigate the recent trends in the incidence of undescended testes in the Helsinki area.
- To evaluate the age at orchiectomy before and after the release of the Nordic consensus on treatment of undescended testes in 2007.

METHODS

- Data on referrals of boys with cryptorchidism to Children’s Hospital, Helsinki University Hospital between 2004 and 2014, were obtained from the patient data system using ICD-10 codes for cryptorchidism.
- Medical records of patients with bilateral cryptorchidism, who were operated upon (n=136), were manually reviewed to obtain their ages at the time of orchiectomy.

RESULTS

- The annual number of referrals (110±20) remained stable during the evaluation period (Figure 1).
- Between 2004 and 2007, all bilateral cases (n=38) were operated after the age of 1 year. After 2007, however, 26/98 boys (27%) were operated before the age of 1 year (P<0.001) (Figure 2). In boys under 3 years of age, the mean (±SD) age at orchiectomy has declined from 23.6±5.6 months (2004-2007) to 14.2±5.2 months (2008-2014) (P<0.0001).

CONCLUSIONS

- The incidence of cryptorchidism, as estimated on the basis of referrals to a single tertiary center, has not increased in Helsinki area between 2004 and 2014.
- The release of the Nordic consensus on treatment of undescended testes is associated with an earlier age at operation and conceivably better outcome.

References: