

Testosterone in surgical repair of proximal hypospadias comparative study

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَقَدْ اَعْمَلُوا فَسَيَرَى اللَّهُ عَمَلَكُمْ
وَرَسُولُهُ وَالْمُؤْمِنُونَ

صدق الله العظيم

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List of Abbreviations

AD	: Androgen Receptor
BXO	: Balanitis Xerotica Obliterans
DHT	: Dihydrotestosterone
DLS	: Dorsal Length Shaft
EUA	: Examination Under Anesthesia
GD	: Glanular Dehiscence
GH	: Glanular Height
GW	: Glanular Width
HOPE	: Hypospadias Objective Penile Evaluation
MVD	: Microvascular density
PAIS	: Partial Androgen Insensitivity Syndrome
SW	: Shaft Width
TIP	: Tubularized Incised Plate
VLD	: Ventral Length Distal
VLP	: Ventral Length Proximal
YTP	: Inverted Y Tabularized Plate

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Introduction and Aim of the Work

Hypospadias is one of the most common congenital anomalies in male children, with a prevalence that has nearly doubled in the last 30 years (*Dold ., 1998*).

However, even in the most experienced hands hypospadias repair is associated with a number of complications, including urethrocutaneous fistula, stenosis, scar formation and galular dehiscence (*Cevdet et al., 2007*).

Repair of the proximal hypospadiac penis can be technically challenging. The use of preoperative androgen therapy to enhance penile size before genital reconstruction has been proposed to improve the cosmetic and surgical results of these demanding operations (*Baskin and Ducket., 1998*).

Hormone therapy preceding surgical correction is indicated to obtain better surgical conditions, favoring better skin conditions, reducing surgical complications, and temporarily increasing penile length and galns circumference (*Hohenfellner et al.,1995*).

Different hormones have been proposed: human chorionic gonadotropin (hCG), dihydrotestosterone (DHT), or testosterone (*Netto et al., 2013*).