شبكة المعلومات الجامعية

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بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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Snodgraft versus Snodgrass repair of primary distal hypospadias comparative study

Thesis

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بسم الله الرحمن الرحيم

قَالُوا سُبْحَانَكَ
لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا ۖ
إِنَّكَ أَنتَ الْعَلِيمُ الْحَكِيمُ

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AAP	American Academy of Pediatrics
DHT	Dihydrotestosterone
DSD	Disorder of Sex Development
EAU	European Association of Urology
GAP	Glans Approximation Procedure
GTIP	Grafted Tubularized Incised Plate
HCG	Human Chorionic Gonadotropin
SD	Standard Deviation
TIP	Tubularized Incised Plate

Introduction

INTRODUCTION

Hypospadias is the second most common birth defect in males and the most common congenital anomaly of the penis. It occurs in approximately 0.7% of males but reports from both Europe and the US in the recent years indicate increasing prevalence. Hypospadias may be associated with other congenital anomalies such as inguinal hernias and undescended testes ***(Snodgrass, 2011).***

Hypospadias is a congenital developmental disorder characterized by the abnormal position of urethral meatus on the ventral penile shaft proximal to end of the glans at any site from the glans to the perineum ***(Murphy, 2014).***

It is caused by the arrest of normal development of the urethra, at various stages of embryonic development (9 to 13 weeks of pregnancy). Besides urethral affection; the development of the raphe and the foreskin can also be involved which results in hypospadias with deviation from the raphe, the formation of a redundant dorsal prepuce foreskin and other ventral defects of the prepuce ***(Troncoso and López, 2008).***

Management of hypospadias is mainly surgical and about 400 surgical techniques for treatment have been published but the search for the "perfect hypospadias correction" still continues ***(Tourchi and Hoebeke, 2013).***

Unfortunately; hypospadias repair even with proper surgical skills can be associated with numerous complications, including urethrocutaneous fistula, meatal stenosis, glanular dehiscence, stricture, urethral diverticula ***(Kaya et al., 2007).***

Tubularized incised plate urethroplasty (TIP) (Snodgrass technique) repair is the most commonly performed technique to correct distal and mid shaft defects in the absence of severe chordee (***Manzoni et al., 2004*).**

Although this technique is widely accepted and performed with good cosmetic outcome; several complications including meatal and/or neourethral stenosis have been reported ***(Snodgrass and Nguyen, 2002),*** prolonged catheterization (7–14 days) remains the main disadvantage of the TIP repair ***(Aslan et al., 2007).***

Urethral stricture is a common problem after hypospadias repair and the second most common complication of hypospadias surgery after urethrocutaneous fistula ***(Tuygun et al., 2009)***

Snodgraft repair using an inner preputial free graft has been described as an effective method for hypospadias repair with the main advantage of reducing the risk of meatal and neourethral stenosis because it could preserve the urethral plate and increase the surface area of healthy epithelium. It does not leave the neourethra with a large raw surface liable to reepithelializion and scar formation ***(Ahmed and Alsaid, 2015).***

The snodgraft technique will also allow the extension of the incision up to the neomeatus at the tip of the glans, which is especially helpful in a hypospadiac penis with a flattened glans. With suturing of the graft in the incision, a vertical slit like neourethral meatus is formed at the glans tip without the risk of stenosis ***(Nerli et al., 2014).***

This is a prospective study aimed to demonstrate that dorsal inlay inner preputial graft urethroplasty is a safe and viable option in the treatment of distal hypospadias. It helps in augmenting the urethral plate so as to make it possible to tubularise the plate.

Aim Of The Work