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Research

Aseel's Operation, Is there a Magic Wand? (Simple Easy and Time Saving Alternative for Distal Penile and Coronal Hypospadii Closure with Less Complications)

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ABSTRACT

Introduction

Distal penile and coronal hypospadui constitutes about 70% of the total hypospadui number yet there is no magical wand to solve the problem.

Materials and Methods

Twenty nine patients were followed up for average of 2 years, (range between 6 months to 5.4 years) age ranged between 1.4 years to 5.2 years. No stent was left, no urethral catheter was left, with minimal tissue dissection and the average operation time was 25 minutes. And patients were discharged on the same day.

Results

Of the 29 patients, all patients were free at long term follow up with no complications but 3 had different degrees of urethral cover suture loss ranged from 1-2 sutures loss to complete cover loss. No urethral meatal stenosis, no urethral diverticulum and no urethral fistula were found.

Discussion

Aseel's operation provides simple easy and time saving alternative for distal penile and coronal hypospadui closure with less complication even in the case of complications and complete cover loss there is no problem ok in redoing it or any other alternative because of the minimal tissue dissection.

Conclusion

Aseel's operation is a good alternative for distal penile and coronal hypospadui closure but nothing is complete, yet it is a good alternative for hypospadius repair.

Keywords: *Hypospadias; Aseel operation; Penile; Coronal.*

INTRODUCTION

Hypospadias is the most common congenital abnormality of the urethra affecting 1 : 300 live male births worldwide. The incidence is on the rise with the increasing environmental pollution as the suspected cause.[1] In 1993, the Birth Defects Monitoring Program (BDMP) has reported a doubling of the rates of hypospadias since 1970s in the United States.[2] Hypospadias is the abnormal location of the urethra on the ventral surface of the penis with variable association with the aborted development of the urethral spongiosum, ventral prepuce, and penile chordee.[3] By meatal location hypospa- dias is classified as anterior (glanular and subcoronal), distal penile, midpenile, and proximal penile), and posterior (penoscrotal, scrotal, and perineal) accounting for 50%, 30%, and 20%, respectively.

The work presented in this article had been selected for presentation in the pediatrics urology session in the SIU annual meetings from 2013 till 2018 by the organizing committee and the supervisors of the pediatric urology session and I would like to take this opportunity to thank them all for this honor and faith in my work.

Distal penile and coronal hypospadui are 70% of the total hypospadui number.[1,2]

Yet there is no single operation that carries the solution for this problem. And there is no magical wand to make this congenital defect goes away.

Each operation carries with it its own flaws and problems from urethral stenosis, meatal stenosis, urethral diverticulum, stone formation over a suture and complete or partial loss of the repair itself.

MATERIALS AND METHODS

Twenty nine patients with distal hypospadias without chordee were operated upon and followed up for average of 2 years, (range between 6 months to 5.4 years) age ranged between 1.4 years to 5.2 years.

First a transverse ventral skin incision is done parallel to the circumcision incision 1cm proximal to the urethral opening (Figure 1).

Figure 1. First a transverse ventral incision is done parallel to the circumsion incision and 1cm proximal to the urethral meatus

Then proximal and distal skin dissection is done freeing the skin edges making them movable A longitudinal incision across the urethral plate extending through the meatus is done (Figure 2).

Figure 2. Then proximal and distal skin dissection is done, A longitudinal incision across the urethra plate extending through the meatus is done

Transverse closure of the longitudinal urethral incision is done that leads to urethral advancement, making the floor to the urethral (Figure 3).

Figure 3. Transverse closure with urethral advancement

Aided by 2 skin hooks skin edges of the distal skin edge is pulled downwards creating an inverted U and the skin edges representing the 2 approxiameted limbs of the inverted U are stitched together to create a roof for the advanced urethral (Figure 4).

Figure 4. Then aided by 2 skin hooks the distal skin edge is pulled downwards to create a roof for the advanced urethra

Followed by closure of the original skin incision edges (Figure 5) no stent was left, no urethral catheter was left,with minimal tis-

sue dissection and the average operation time was 25 minutes. And the patients were discharged on the same day.

Figure 5. Followed by closure of the skin incision, no catheter or stent is left. nb (the urethral catheter is a nelaton cath.that is put for demonstration then removed)

The excess skin is dealt with at a later stage where it is circumsized.

RESULTS

At follow up there were no incidence of long term complications as meatal stenosis, urethral diverticulum, urethral stricture and urethral fistula. When compared to other options as the TIP opetation, Mathieu and MAGPI operations that have these complications at a mean rate of 2-10%, but you should have in mind that it has a comparable incidence of early complications in follow up in the range of almost 10%, 3 cases had operation failure due to loss of some or all urethral roof stitches that needed redo of the operation two had TIP and one had redo of the same operation.[1-10]

DISCUSSION

For decades there was no universal solution for repair of distal penile hypospadias. Though it represents the major number of cases 70%. Several operations had been suggested as MAGPI, Mathieu and recently TIP operations and several others yet no operation became the gold standard, as each operation carries with. It it's own drawbacks and side effects. Several review articles compared different operations and most of them stated that all have a complication rate of around 2–10%[5,8,10-12] that included meatal stenosis, urethrocutaneous fistula, urethral diverticulum, urethral stricture and complete failure due to infection, ischemia or both.

Aseel's operation is a very simple, fast and easy to learn technique, it has the advantage of having.

1. No incidence of urethral fistula, stricture and diverticulum formation with no urethral meatal stenosis as well,the urethra in this technique is wide with wide meatal opening that leave no chance for stricture formation.

2. As there is no urethral catheter or stent left in place there is minimal risk of urinary tract infection with the relative ischemia it produces that adds to a better healing,

3. Less postoperative pain due to the absence of urethral catheter or stent and minimal tissue dissection.

4. Even in the case of failure as there was minimal tissue manipulation and anatomical disruption, so repair or redo is easier to be done.

But there is nothing complete, due the small amount of stitches that closes the urethral roof (3-4), loss of any of them will jeopardize the roof healing.still it has acomparable incidence of compllications (10%).[1-13]

Nevertheless it represents a viable option and worth to be considered in the repair of distal penile and glanular hypospadias without chordee.

CONCLUSION

Aseel's operation is a useful alternative for distal penile and glanular hypospadii repair. It has a comparable rate of complications when compared against other available options yet it has many advantages.

CONFLICTS OF INTEREST

None.

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