

Posterior Anastomotic Urethroplasty in an Infant

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INTRODUCTION

Boys with high imperforate anus have a recto urethral fistula, which usually occurs at the prostatomembranous junction.

Recent trend is to perform a single stage posterior sagittal posterior anorectoplasty (PSARP) with pull through and closure of fistula. Inadvertent posterior urethral injury during repair may result in traumatic obliteration.

AIM

We evaluated our outcomes of posterior urethroplasty in infants.

MATERIAL & METHODS

We evaluated infants referred to us with posterior urethral injury after PSARP.

We managed 3 infants with posterior urethral injury - 3 after PSARP during 2012 to 2016.

Follow up ranged from 6 months to 4 years.

Iatrogenic injury was noticed after PSARP on removal of catheter. Suprapubic catheter (SPC) was inserted. Retrograde urethrogram (RGU), voiding cystourethrogram (VCUG) and endoscopy from above and below was performed before anastomotic urethroplasty.

RESULTS

Our study included 3 infants. They were born with high imperforate anus and recto urethral fistula.

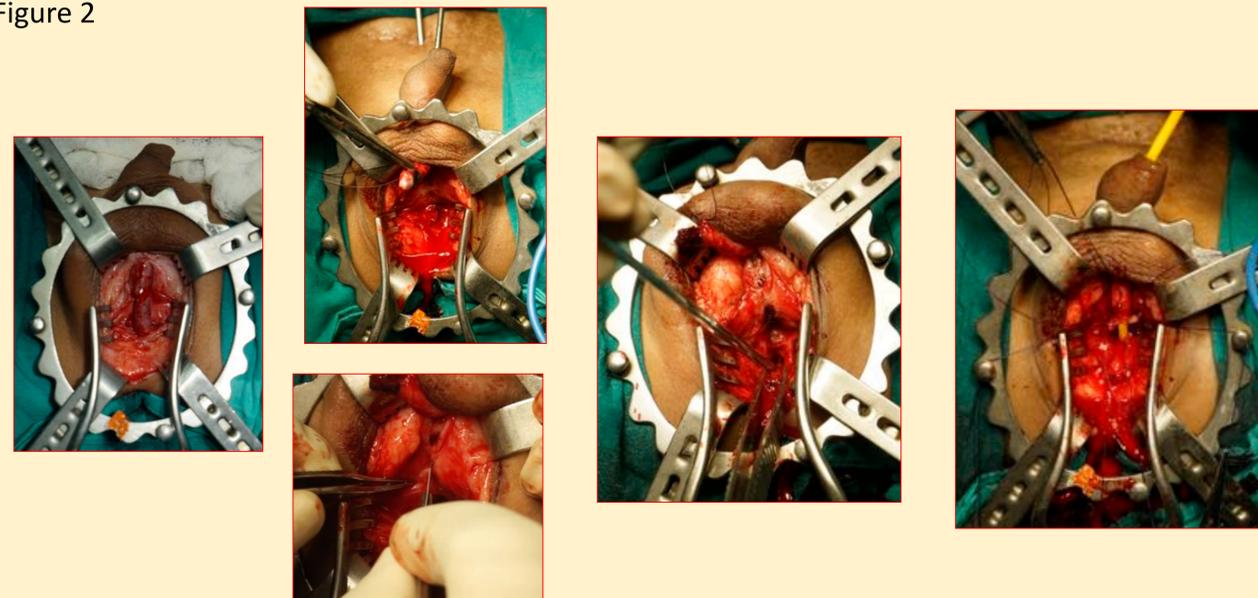
PSARP was complicated by posterior urethral transection resulting in an obliterated urethra.

This was initially managed with a supra-pubic catheter followed by transperineal anastomotic urethroplasty.

Figure 1



Figure 2



Two required crural separation and inferior pubectomy.

Two infants had an uneventful recovery.

One infant had an annular narrowing at the anastomotic site and required endoscopic internal urethrotomy twice. We waited till the child was older (age 4) and performed urodynamics. This revealed obstruction and the patient underwent redo anastomotic urethroplasty with crural separation and inferior pubectomy. This had an uneventful recovery.

Table 1

Study group	Age in months	Anastomotic Urethroplasty	Recurrence
Boy 1	4	Step 4	yes
Boy 2	3	Step 4	none
Boy 3	6	Step 2	none

SUMMARY / CONCLUSION

- Iatrogenic urethral injuries are rare in infants.
- Anastomotic urethroplasty achieves physiological voiding and prevents complications of prolonged SPC.
- Even though the surgery is challenging in an infant, our series, suggest that this is feasible with good outcomes.

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