Posterior Hypospadias: how to choose the Best Technique

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Key Points of The Repair of Proximal Penile Hypospadias

- **In Least Number Of Operations:**
  - Straightening of the penis
  - Construction of normal calibre urethra with accepted complication rate
  - Achievement of good cosmetic outcome

Is it possible To Answer This question?
• problems are numerous:
  • Urethral reconstruction: single versus multistage
  • Management of curvature: dorsal plication versus ventral corporotomies
  • Definition of complications: obstruction, partial dehiscence, meatal stenosis
  • definition of the least time for follow up and frequency
  • shortage of prospective well designed studies

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Seul temps opératoire
40 enfants
âge moyenne: 2.8 ans
Duckett Onlay 29 soit 72.5%
Tube 11 soit 27.5%
45% complications
  fistule 15%
sténose du méat 12.5%
lâchage complet 10%
diverticule urétérale 5%

P= .04

deux temps opératoire (Braka)
25 enfants
âge moyenne 4.5 ans
greffe preputial 17
greffe de la muqueuse orale 8
20% complications
  fistule 4 soit 16%
lâchage complet 1 soit 4%
Curvature is the most important parameter.

• **Penile curvature is classified into:**
  
  • Mild: less than 30 degrees (nothing may be done)
  
  • Moderate: 30-45 (degloving, extended bulbar dissection, plate mobilization +/- dorsal plication)
  
  • Severe: more than 45 (plate transection +/- ventral corporoplasty)

  *Mingin and Baskin et al*
Is there any prospective study comparing dorsal plication to ventral lengthening? NO

- **Braga et al reported a retrospective comparison:**
  - Group I: 32 ventral lengthening with 30 UP transections
  - Group II: 68 dorsal plication only 16 UP transections
  - Mean follow up: 2 years
  - Recurrence of ventral curvature: group I Vs group II (9.4% Vs 27.9%)

Staged Tubularized Autograft Repair for Primary Proximal Hypospadias with 30-Degree or Greater Ventral Curvature

Warren Snodgrass* and Nicol Bush

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43 children curvature more than 30 degrees
preputial graft 88%
oral graft in 12%
ventral corportomies 65%
no recurrence of curvature complications:
10 children 23%
fistula and glanular dehiscence
overall success after multiple surgeries 98%

Staged procedure

Graft Vs flap
Complications Following Staged Hypospadias Repair Using Transposed Preputial Skin Flaps
Irina Stanasel J Urol 2015, Texas USA

- 56 enfant
  - âge moyen: 14 mois
  - suivi: 34 mois médiane
- 68% complications:
  - 57% fistule
  - 14% diverticule
  - 9% sténose de méat
  - 14% sténose de l’uretre
  - 5% lâchage de gland

Management of Proximal Hypospadias with 2-Stage Repair: 20 Year Experience
Marc Cendron et al J Urol 2015 Multicentre study

- 1993-2012
- 134 enfant
  - âge médiane: 8.8 mois
  - suivi médian: 3.8 ans
- 53% complications
  - 30% fistule
  - Reprise chirurgicale dans 59%
Redo of the first stage
Second stage
Résultats
2011-2018
43 children first stage
mean age 20 months (6-132)
meatal position
18.6% penoscrotal
67.4% scrotal
14% périnéal
Inner Prepuce in all children

curvature:
plate transection 62.8%
ventral corporotomies 37.2%

scrotal anomalies

scrotal transposition: 9

bifid scrotum:

14 children : Z- plastie,
15 children : midline closure

first stage
Sucess 90.7%
4 Redo buccal Graft
Second stage
37
success after second stage: 56.8%

Urethral complications 43.2%
Fistula: 24.3%
success of redo fistula: 100%

Glanular dehiscence 24.3%
redo in 4 children (25% succès), 3 children 75% re glanular dehiscence

Overall success: 83.3 %

Meatal stenosis: 0
Urethral stenosis: 0
Complete dehiscence: 0
Diverticulum: 0
Recurrence of curvature: 5.4%
Mean follow up: 3.2 years
The dilemma continues