Jayaramdas Patel Academic Centre

Muljibhai Patel Urological Hospital

URETHROPLASTY

Nadiad – Gujarat - India

July 19 – 20, 2012
Acute management of posterior urethral trauma. What are the options and what is the current consensus.
Emergency treatment of patients with pelvic fracture urethral distraction defects
Pelvic fracture urethral distraction defects
PFUDD

• orthopedic surgeon
• general surgeon
• vascular surgeon
• thoracic surgeon
• urologic surgeon
Mr. Richard Turner-Warwick

“... It is the urologist who will have to share, with the patient, the burden of any residual urological disability when the thoracic, the abdominal, and even the orthopaedic aspects are probably long forgotten”
Goal of the initial evaluation and management of the patient with PFUDD

The immediate concern, in the patient with PFUDD, is resuscitation of the patient to preserve life.

Divert urine away from the site of injury.

Preserve the residual sphincter mechanism at the bladder neck.

Avoid jeopardizing sexual function residual to the trauma.
Emergency treatment of posterior urethral trauma

- Immediate suprapubic urinary diversion
- Endoscopic urethral realignment: 7 – 15 days following trauma
- Delayed urethroplasty: 4 months following trauma
Management of posterior urethral trauma with associated lesions

Immediate surgical repair

bladder

bladder neck

rectum

e-mail: info@urethralcenter.it

Websites: www.uretra.it
          www.urethralcenter.it
Management of posterior urethral trauma without associated lesions

suprapubic cystostomy

stretched  partial rupture  complete rupture
Why ?
Goal of the initial evaluation and management of the patient with PFUDD

The immediate concern, in the patient with PFUDD, is resuscitation of the patient to preserve life.

- Divert urine away from the site of injury
- Avoid jeopardizing sexual function residual to the trauma
- Preserve the residual sphincter mechanism at the bladder neck
Suprapubic cystostomy is the only method than can surely avoid to damage the bladder neck, thus fully preserving urinary continence!
Emergency treatment of posterior urethral trauma

**Immediate suprapubic urinary diversion**
- Empty the bladder and release pain due to the over distended bladder
- Divert urine away from the site of injury
- Perform a cystography
Endoscopic urethral realignment
Endoscopic urethral realignment

- appropriate operating room
- appropriate instruments
- appropriate patient
- appropriate surgeon
Endoscopic urethral realignment

appropriate operating room?
Endoscopic urethral realignment

appropriate instruments?
Endoscopic urethral realignment

appropriate patient?
Endoscopic urethral realignment

appropriate surgeon?
Four-hours emergency (?) urethral realignment in the plaster-cast room (?)
Five-hours emergency (?) urethral realignment
In one week, this patient underwent five attempts (?) to perform endoscopic and surgical urethral realignment
Endoscopic urethral realignment

7 – 15 days following trauma

Why?
Endoscopic urethral realignment
Complex obliterative posterior urethral stricture
Perineal pubectomy
Perineal pubectomy
YES
Endoscopic urethral realignment
Simple no-obliterative posterior urethral stricture
Holmium laser urethrotomy
Holmium laser urethrotomy
Results on 33 patients who underwent holmium laser urethrotomy for traumatic posterior urethral strictures.

Mean follow-up 73 months (12 – 125 months)
Results on 33 patients who underwent holmium laser urethrotomy

Result after one urethrotomy

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>success</td>
<td>18 (54.5%)</td>
</tr>
<tr>
<td>failure</td>
<td>15 (45.5%)</td>
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Results on 33 patients who underwent holmium laser urethrotomy

Result after two urethrotomies

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<tr>
<td>success</td>
<td>27 (81.8%)</td>
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<tr>
<td>failure</td>
<td>6 (18.2%)</td>
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Results on 33 patients who underwent holmium laser urethrotomy

Result after three urethrotomies

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<tbody>
<tr>
<td>success</td>
<td>30 (90.9%)</td>
</tr>
<tr>
<td>failure</td>
<td>3 (9.1%)</td>
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Results on 33 patients who underwent holmium laser urethrotomy

Result after five urethrotomies

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<tr>
<td>success</td>
<td>32 (96.9%)</td>
</tr>
<tr>
<td>failure</td>
<td>1 (3.1%)</td>
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Results on 33 patients who underwent holmium laser urethrotomy
The use of holmium laser urethrotomy may represent a rationale option in patients with posterior traumatic no-obliterative short urethral stricture.

- No damage to the erectile neuro-vascular tissue

- Patient should be fully informed that only 54.5% of patients require only one urethrotomy

- 45.5% of patients require two or more urethrotomies to obtain a stable result over time
Delayed treatment of patients with pelvic fracture urethral distraction defects

Posterior urethroplasty
Sava Perovic Memorial

September 14 - 15, 2012
Centro Giuridico Toscano
Via del Licoli, 22
Arezzo, Italy

2nd Conference on Failed Hypospadias Repair

Live Surgery

4th Surgical Workshop of CUGRS
(Complex Uro-Genital Reconstructive Urological Surgery)

Organizing Committee:
Center for Reconstructive Urological Surgery - Sava Perovic Foundation

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Next month, this lecture will be fully available on our website

Thank you!