Center for Reconstructive Urethral Surgery

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3rd SURGICAL WORKSHOP OF CUGRS

Complex Uro-Genital Reconstructive Surgery

Belgrade – Serbia

29 - 30 October 2010

e-mail: info@urethralcenter.it website: www.urethralcenter.it
Failed hypospadias repair

How often it is and how to prevent it?
Failed hypospadias repair

How often it is?

“Strictures in adults who had a hypospadias repair is a growing industry”

Dear Colleagues,
The European Center for Failed Hypospadias Repair is pleased to invite you to the
1ST INTERNATIONAL CONFERENCE ON FAILED HYPOSPADIAS REPAIR
which will be held on SEPTEMBER, 18th 2010 in AREZZO, ITALY.
We look forward to welcoming you.

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Failed Hypospadias Repair

Epidemiology and Incidence

Surgical Techniques

Evaluation of Results
Object of the Conference on Failed Hypospadias Repair

To organize three permanent international scientific committees to collect, to elaborate and publish data on Failed Hypospadias Repair
1176 patients

The Center for Reconstructive Urethral Surgery
Arezzo - Italy
223 patients

The University Children’s Hospital
Belgrade - Serbia
953 patients

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Surgical Challenge in Patients Who Underwent Failed Hypospadias Repair: Is It Time to Change?

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Patients with urethral stricture diseases: 1510

Failed hypospadias repair: 223 (14.7%)

Barbagli G et al., J Urol 2010, 183:207-211
Patients with penile urethral stricture diseases: 437

Failed hypospadias repair: 223 (51%)

Barbagli G et al., J Urol 2010, 183: 207-211
Failed hypospadias repair

How to prevent it?
Our experience showed **two different populations** in which attempts at hypospadias surgical correction failed.
Patients showing multiple penile deformities caused by:

- Error in evaluation
- Error in design
- Error in surgical technique
- Error in postoperative care
Patients showing multiple penile deformities caused by:

- Error in evaluation
- Error in design
- Error in surgical technique
- Error in postoperative care

These patients should be classified as “complications” after hypospadias surgery.
Patients showing a satisfactory final outcome having:

- Cosmetically acceptable meatus
- No evident penile deformities such as fistula or chordee
- Urethral stricture
Patients showing a satisfactory final outcome having:

- Satisfactory penile appearance
- No evident penile deformities such as fistula or chordee
- Urethral stricture

These patients should be classified as “natural evolution” over time of hypospadias repair
Failed hypospadias repair

“Complications” of surgical repair

“Natural evolution” of surgical repair

How to prevent it?

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How to prevent “complications” in hypospadias repair?
How to prevent the disastrous “natural evolution” of hypospadias repair?
Why hypospadias repair deteriorate over time?
The pediatric urologist maintains that:

“The neo-urethra I construct in the child will follow the growth of the penis into adulthood”
Have you ever seen an ant become an elephant?

18 months old

18 years old
The normal urethra is a spongiosum-made urethra
The urethra in the patient who underwent hypospadias reconstruction is a skin-made urethra.
What is the difference between the spongiosum-made urethra and the skin-made urethra?
As far as urinary function is concerned, the reconstructed skin-made urethra is able to work as a normal spongiosum-made urethra.

Pediatric surgeons and parents are very satisfied with the outcome…….
….but, unfortunately, the urethra is a part of the penis…

…and when children reach full sexual maturity, problems come …
...and the skin-made urethra over time will be KO!
Why?
The skin-made urethra is not surrounded by the soft, well vascularized corpus spongiosum ...
... and this skin-made urethra does not tolerate
the repeated mechanical stretch and trauma during
errection and sexual activity
During sexual activity, the corpus spongiosum is to the urethra what the airbag is to the body during a car accident.
The lack of spongiosum tissue promotes urethral deterioration over time.
Hypospadias surgery is now at its end-point

Pediatric urologists’ triumph over the results of hypospadias repair in childhood is not justified
Success in hypospadias surgery is not measured in one or even in five years.

In order to collect more detailed epidemiological data, pediatric surgeons are invited to publish the long-term results (> 20 years) of hypospadias surgery performed in their hospitals.
How to prevent the disastrous “natural evolution” of hypospadias repair?

Hypospadias surgery will have improved only when corpus spongiosum is made available, and a new spongiosum-made urethra can be transplanted in the patient.
Next month, this lecture will be fully available on our website

Thank you!