

Center for Reconstructive Urethral Surgery



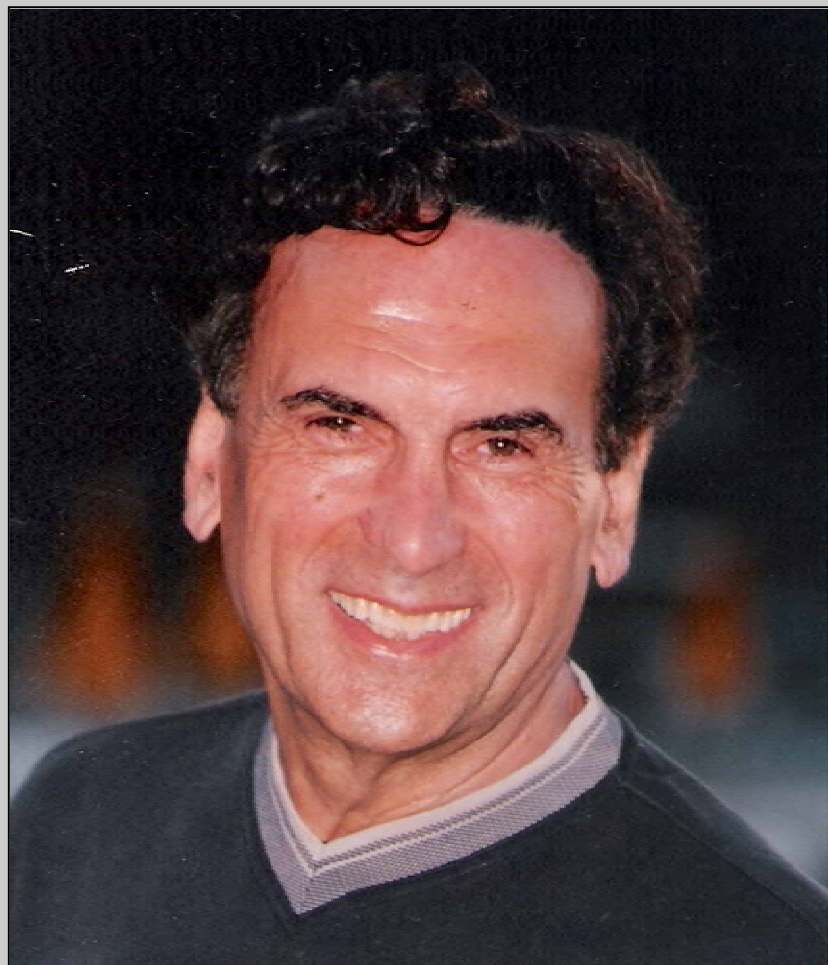
GUIDO BARBAGLI M.D.

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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

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Center for Reconstructive Urethral Surgery

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 ”

Andrich DE and Mundy AR, Eur Urol 2008, 54:1031-1041



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.



Failed Hypospadias Repair
www.failedhypospadias.com

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

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

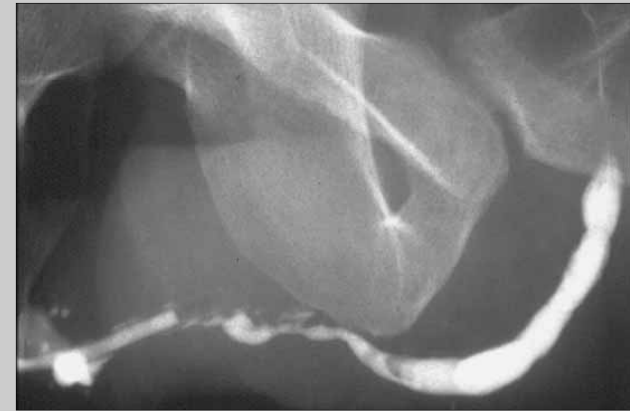


Patients showing a satisfactory final outcome having:



**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

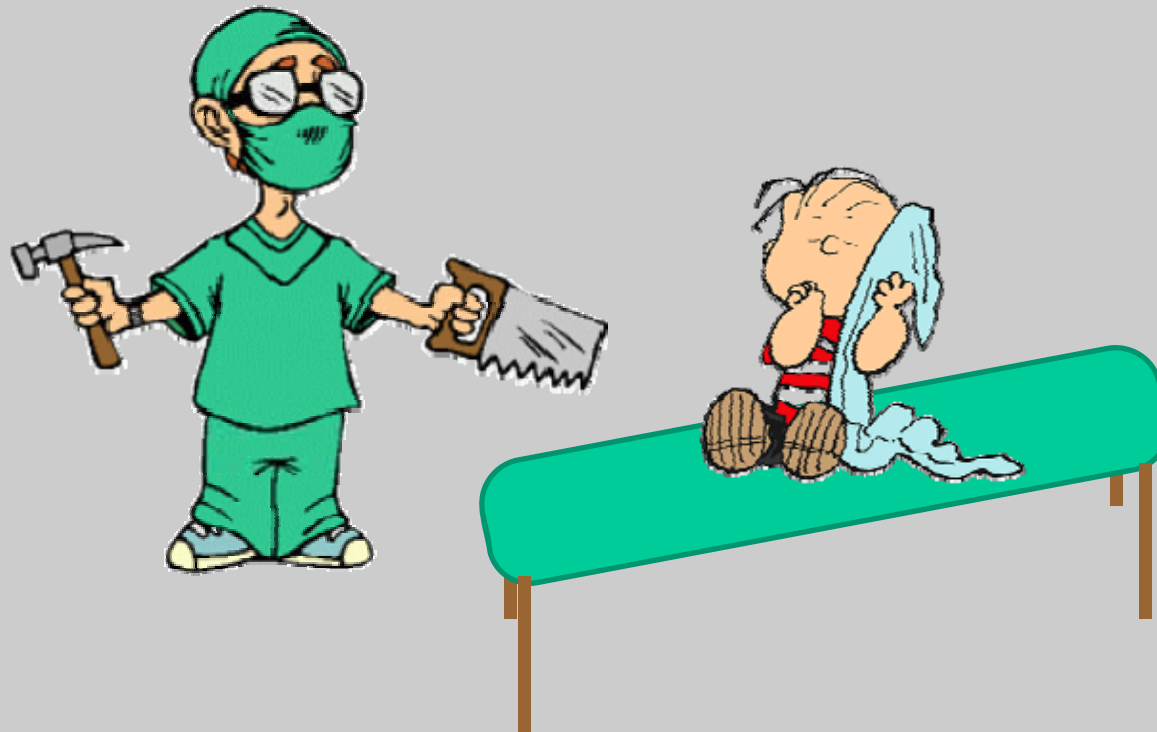
“Natural evolution” of surgical repair

How to prevent it?

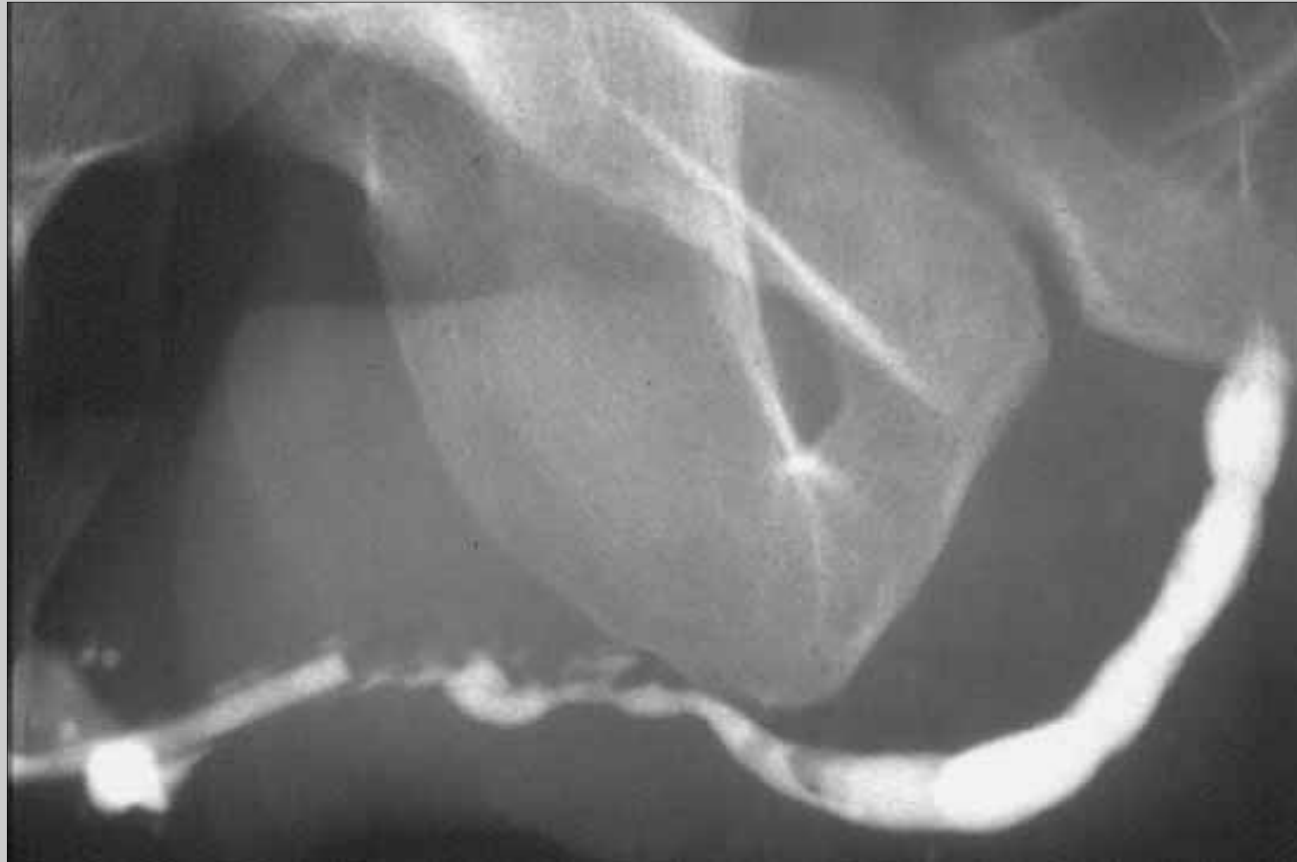
How to prevent “complications” in hypospadias repair?



How to prevent the disastrous “natural evolution” of hypospadias repair?



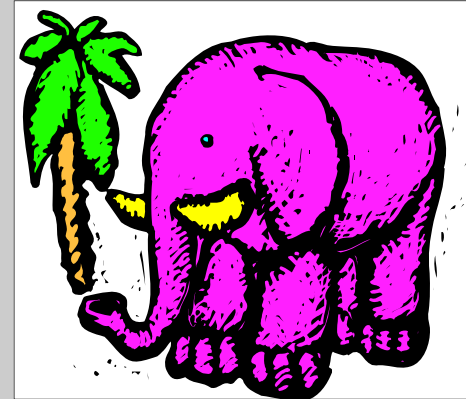
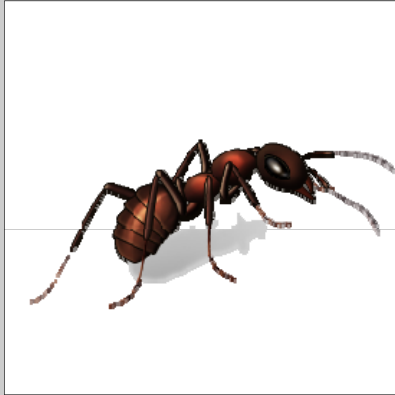
Why hypospadias repair deteriorate over time?



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 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...



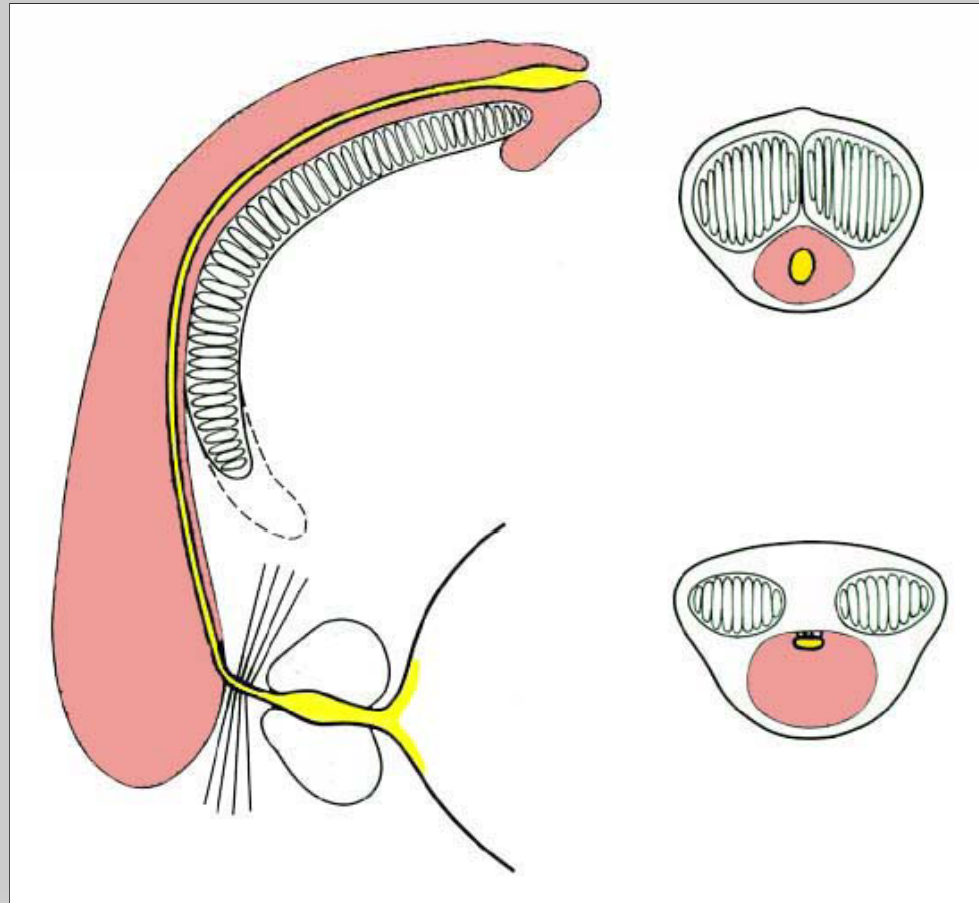
...and when children reach full sexual maturity, problems come ...

...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** ...



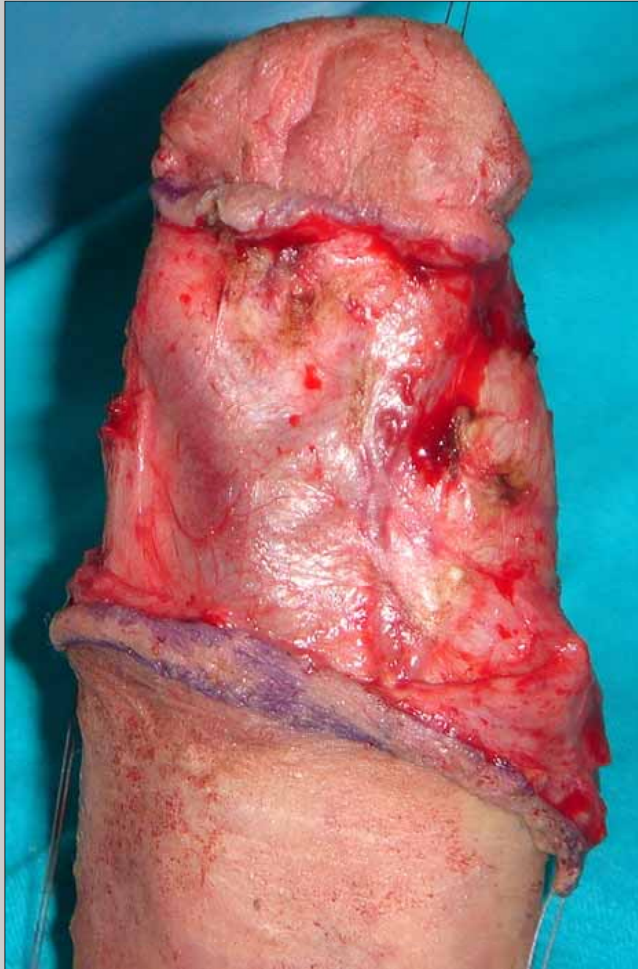
... and this **skin-made urethra** does not tolerate
the repeated mechanical stretch and trauma during
erection and sexual activity



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

www.urethralcenter.it



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

Thank you !

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