

# Retrospective descriptive analysis on 1176 patients with failed hypospadias repair

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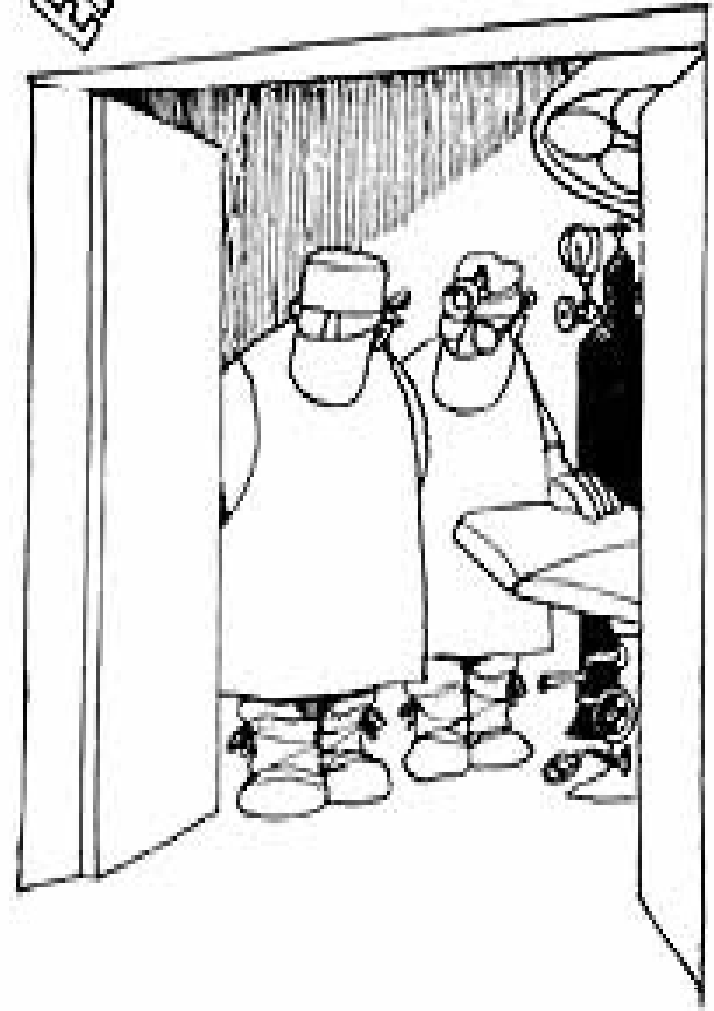
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ERRARE HUMANUM EST





# FAILED HYPOSPADIAS POPULATION

- Incidence
- Characteristics



An iceberg floating in the ocean. The tip of the iceberg is visible above the water surface, while the much larger, submerged part is hidden below. The word "UNKNOWN" is written in red across the submerged portion of the iceberg.

## FAILED HYPOSPADIAS POPULATION

- Incidence
- Characteristics

**UNKNOWN**



# Survey #1

## **Retrospective Descriptive Analysis of 1,176 Patients With Failed Hypospadias Repair**

Guido Barbagli, Sava Perovic, Rados Djinovic, Salvatore Sansalone and Massimo Lazzeri\*

J Urol 2010

observational, descriptive survey

1998 – 2007

1176 failed hypospadias repair

urethral strictures & penile defects



# Materials and methods:

- primary site of meatus
- age
- number of surgical procedures



# QUERIES

- proximal > distal ?
- older techniques > new techniques ?
- single staged procedures ?



# Results: primary site of meatus

position	n	%
glandular	193	16.4
penile	702	59.7
penoscrotal	281	23.9

**Distribution  
similar to  
primary  
hypospadias  
population**



# Results: patient age

Age (years)	N° patients
1 – 16	250 (21.2%)
17 – 20	451 (38.4%)
21 – 40	358 (30.5%)
41 – 60	112 (9.5%)
>60	5 (0.4%)

1990 – 2000

1980 – 1990

**Modern  
hypospadias  
surgery  
era**



# Results: number of operations

## PRIOR CORRECTION

N° operations	N° patients
1	130 (11.1%)
2	347 (29.5%)
3	320 (27.2%)
4	159 (13.5%)
5	108 (9.2%)
> 5	112 (9.5%)

**mean: 3.3 (1 – 23)**

## SALVAGE REPAIR

N° operations	N° patients
1	760 (64.6%)
2	280 (23.8%)
3	82 (6.9%)
4	31 (2.7%)
5	9 (0.8%)
> 5	14 (1.2%)

**mean: 2.3 (1 – 8)**



# Results: number of operations

PRIOR SURG + SALVAGE	
N° operations	N° patients
2	102 (8.7%)
3	289 (24.6%)
4	369 (31.4%)
5 - 10	311 (26.4%)
11 - 20	91 (7.7%)
> 20	14 (1.2%)

**mean: 5.8**

**(2 – 23)**

**SINGLE  
STAGE  
SURGERY?**



# QUERIES

- proximal > distal?

NO

- older techniques > new techniques?

NO

- single staged procedures?

NO



# Conclusion #1

**OUR  
STUDY**

True incidence and  
epidemiology  
of  
failed hypospadias in  
adult

remains to be  
quantified



## Survey #2

## Type of salvage surgery

**Urologia**  
Internationalis

Original Paper

Urol Int 319856  
DOI: 10.1159/000319856

(in press)

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

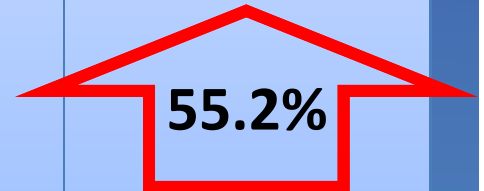
S. Perovic<sup>a,†</sup> G. Barbagli<sup>b</sup> R. Djinovic<sup>a</sup> S. Sansalone<sup>c</sup> S. Vallasciani<sup>b</sup>  
M. Lazzeri<sup>d</sup>



Center for Reconstructive Urethral Surgery

# 1176 patients

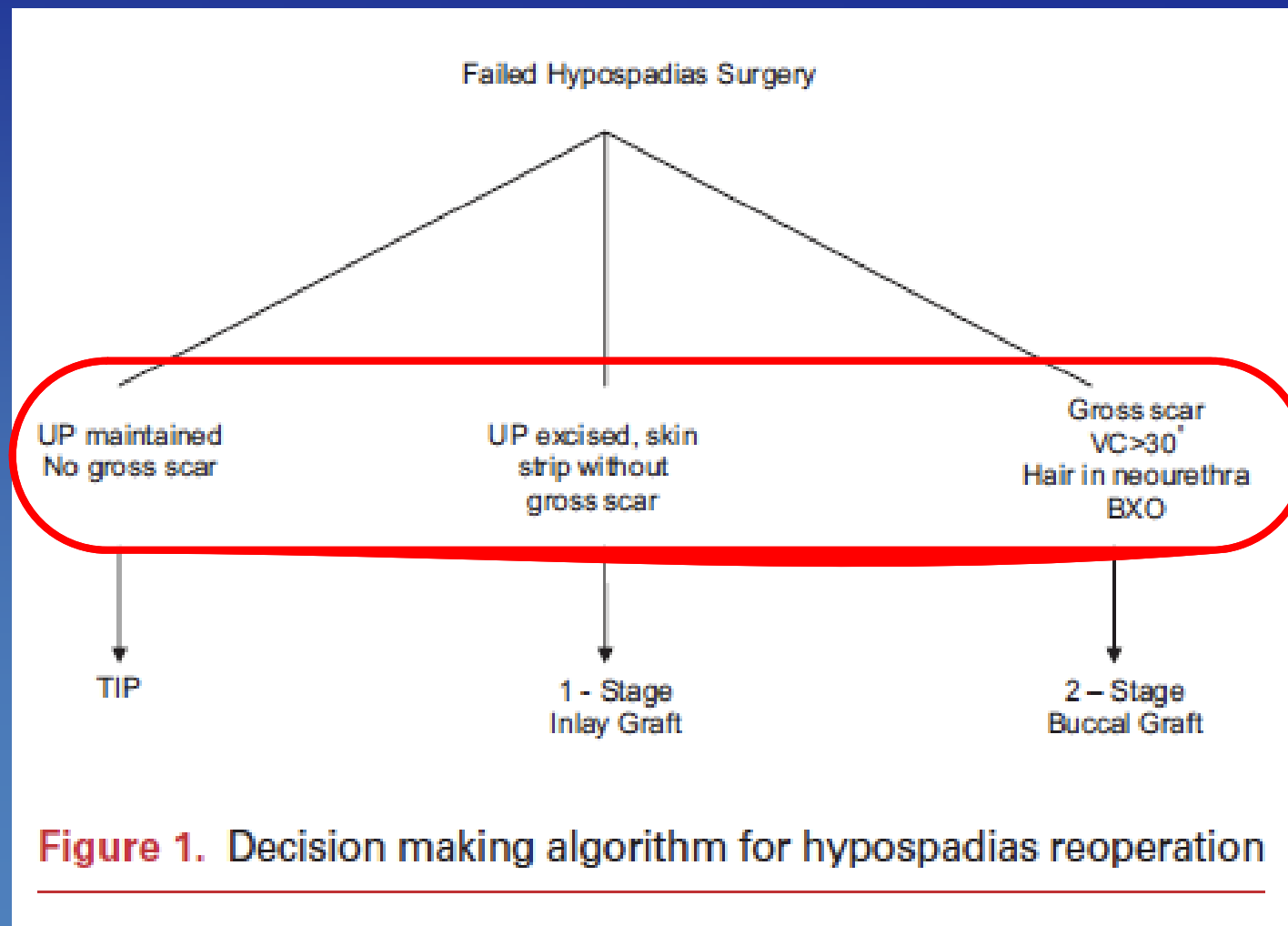
<b>SURGERY</b>	<b>n</b>	<b>%</b>
<b>URETHRA</b>	301	25.5%
<b>CORPORA</b>	60	5.2%
<b>URETHRA + CORPORA</b>	166	14.1%
<b>COMPLEX</b> (urethra + corpora + glans + penile/scrotal skin)	649	55.2%



# Algorithm for Comprehensive Approach to Hypospadias Reoperation Using 3 Techniques

Warren T. Snodgrass,\* Nicol Bush and Nicholas Cost

J Urol 2009



BASED  
ONLY  
ON  
URETHRAL  
PLATE

Figure 1. Decision making algorithm for hypospadias reoperation



# Results on salvage surgery

<b>SURGERY</b>	<b>%</b>	<b>SUCCESS RATE</b>
<b>URETHRA</b>	25.5%	<b>89.7%</b>
<b>CORPORA</b>	5.2%	<b>96.7%</b>
<b>URETHRA + CORPORA</b>	14.1%	<b>88.5%</b>
<b>COMPLEX</b> (urethra + corpora + glans + penile/scrotal skin)	55.2%	<b>86.4%</b>



## Conclusion #2

Most patients in our survey (55.2%) need complex reconstruction.

Success rate in this group was the lowest in this series



**CLOSING**

**REMARKS**



In our survey, any type of  
primary hypospadias  
(glandular to penoscrotal)  
showed a high failure rate  
over time



Only a small number of patients  
had a single procedure.

[mean 5.8 operations]

**... and still most of them are not  
satisfied with results!**



**URETHRAL**

**MULTI  
SPECIALIZED  
SKILLS**

**P  
E  
D  
I  
A  
T  
R  
I  
C**

**P  
L  
A  
S  
T  
I  
C**

**ANDROLOGICAL**



**FAILURE**

**SUCCESS**

URBAN AREA



FAILURE

SUCCESS





**NW Argentina - 3000 km from Buenos Aires**

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**Warren Snodgrass**

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(editorial comment)

## “3 P”

- ✓ **P**rospective data collection
- ✓ **P**eriodic review of outcomes
- ✓ **P**ractice changes based on these results



**FAILURE**

**SUCCESS**

*Thank you  
for  
your  
attention*

**FAILURE**

**SUCCESS**

