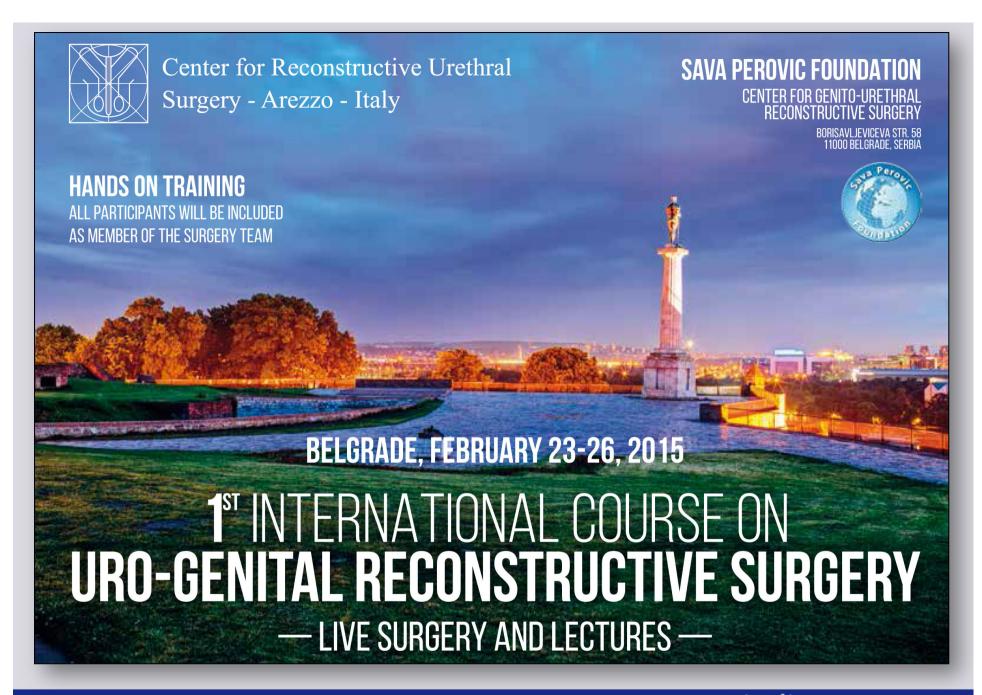
#### CENTER FOR RECONSTRUCTIVE URETHRAL SURGERY



e-mail: info@urethralcenter.it

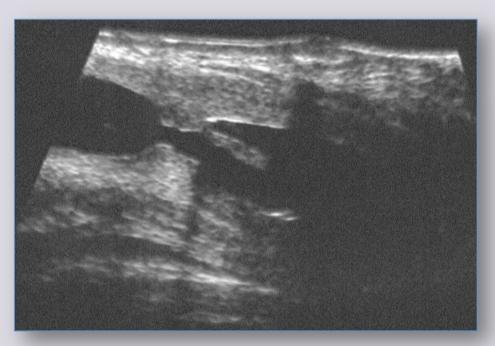
Websites: www.uretra.it www.urethralcenter.it



# Urethral strictures: Etiology, terminology, and diagnosis



#### **CONGENITAL**





Cobb's collar – J Urol 1968; 99: 629-631

#### **IDIOPATHIC**



#### **TRAUMATIC**

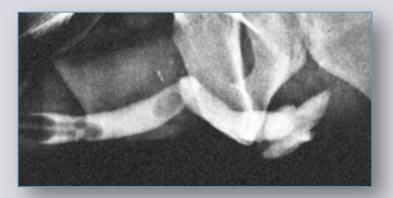


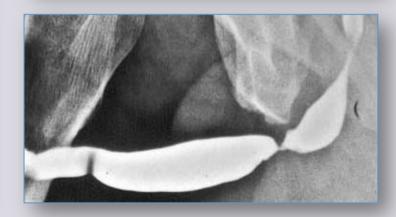


**Previous history of perineal trauma** 

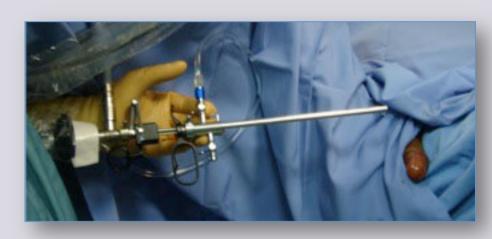
#### **TRAUMATIC**







#### INSTRUMENTATION



**TURP** 

**TURB** 

**TUIP** 

**HOLEP** 

**URETHROSCOPY** 

**CYSTOSCOPY** 





#### **CATHETER and ISCHEMIA**



## **Blood pressure < 60 mmHg**

Patients in resuscitation room

Patients bleeding after surgey

Patients who underwent cardiovascular surgery

#### INFECTION



Neisseria Gonorrhoeae

65.5% of cases in Nigeria – 82% of cases in Sudan

#### FAILED HYPOSPADIAS REPAIR

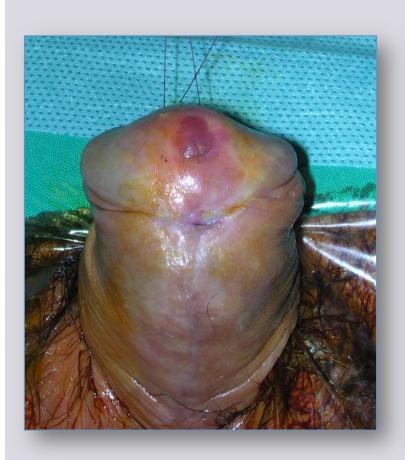






"Surgery for failed hypospadias repair is a growing industry "AR. Mundy

### LICHEN SCLEROSUS



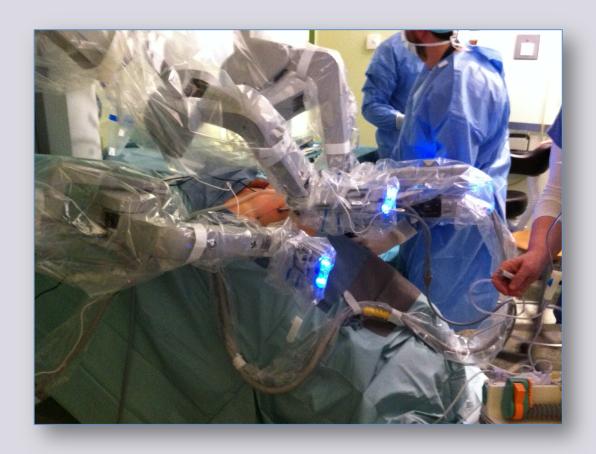


#### **RADIOTHERAPY**



High incidence is reported in studies from USA

### RADICAL PROSTATECTOMY



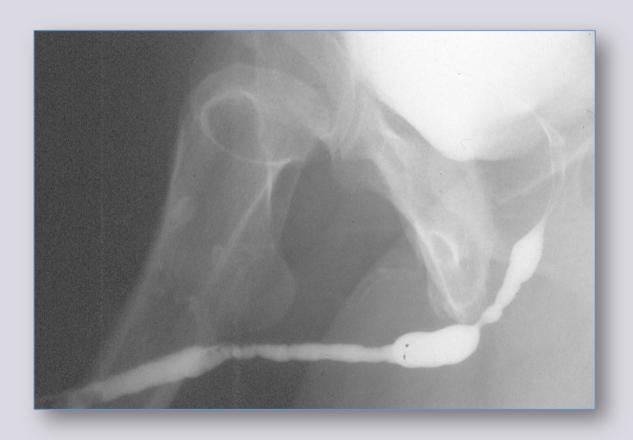
The incidence is greatly reduced after the use of robot

#### **URETHRAL STRICTURE**



Single – short < 2cm - no previous treatment - no associated local adverse conditions

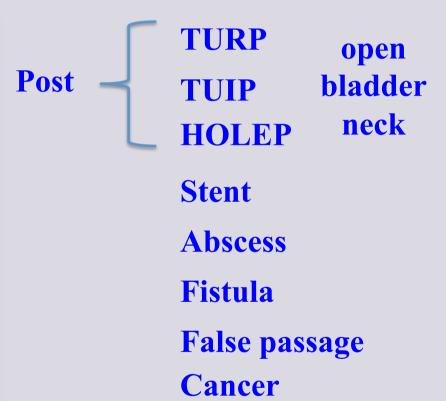
#### URETHRAL STRICTURE DISEASE



Double  $-\log > 2cm - previous$  failed treatment

#### COMPLEX URETHRAL STRICTURE DISEASE





Stricture associated with local adverse conditions

#### FAILED HYPOSPADIAS REPAIR







Urethral stricture disease associated with complex congenital disorder of the genitalia

#### **LICHEN SCLEROSUS**





Urethral stricture disease associated with complex immunological disorder of the genitalia

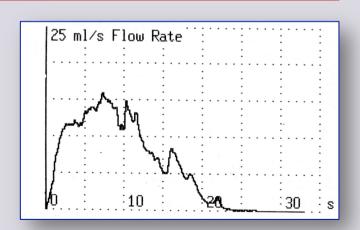
www.uretra.it Websites: www.urethralcenter.it

## Diagnosis of urethral stricture

Symptoms (obstruction – infection – irritation)
Signs (skin lesions – prior surgery – abscess)

Uroflowmetry
 Ultrasonography (kidney – bladder – urethra)

3 Urethrography
Urethroscopy
MRI



## Radiological study of urethral stricture

**Urethrography** 

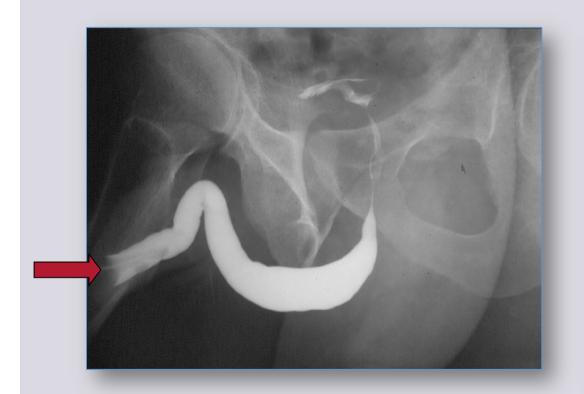
- Retrograde
- Voiding
- Combined

**Ultrasonography** 

**Urethroscopy** 

**MRI** 

# Retrograde and voiding urethrography





# Object of the radiological study of urethral stricture

• Site

• Number

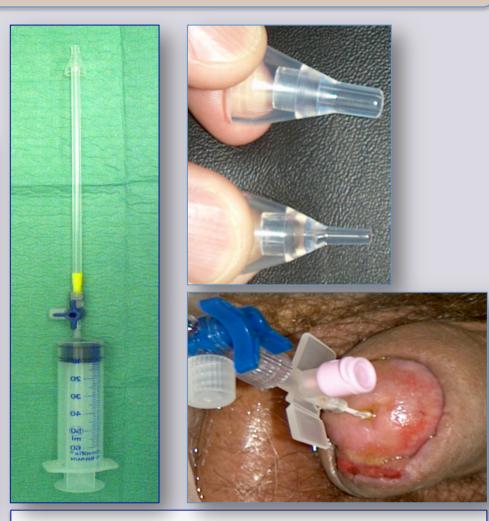
• Length

Spongiofibrosis

Associated conditions



appropriate patient position

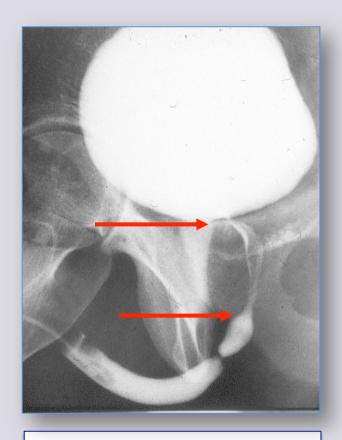


appropriate instruments

## blind point



Meatus and navicularis tract

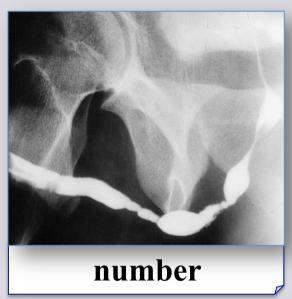


**Proximal tract** 





length





#### **Associated conditions**





diverticulum

stone

# Voiding urethrography

# appropriate patient position

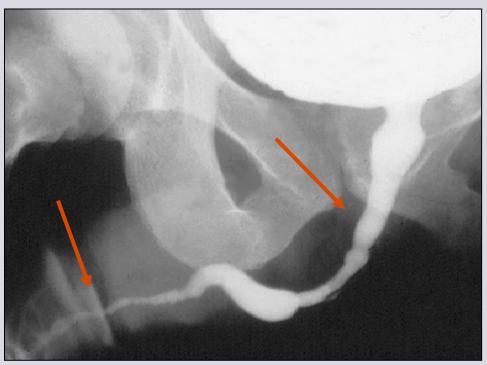


# **Voiding urethrography**

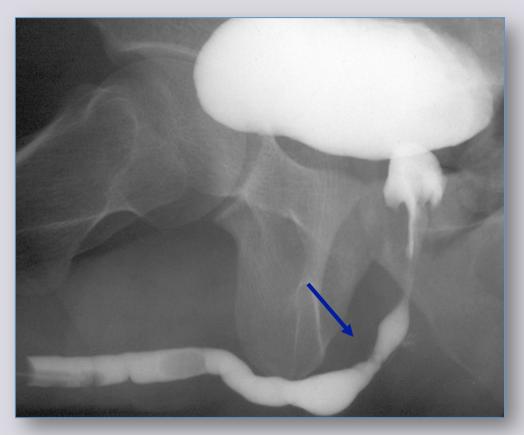
# blind point

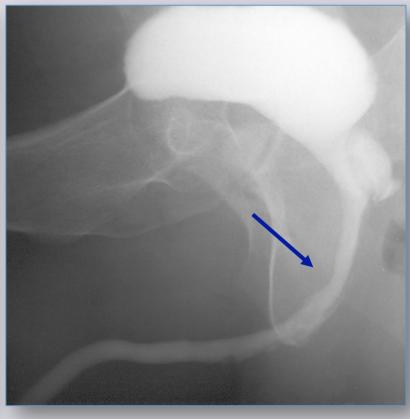


Meatus and navicularis tract



Distal penile tract Sphincter area





Retrograde

Voiding

# Voiding urethrography in patients who underwent bulbar urethroplasty:

#### evaluation of the outcome







good

satisfactory

poor

# **Combined cystourethrography**



# Combined cystourethrography in patient with traumatic posterior urethral stricture





# **Urethral sonography**





# Stricture length and spongiofibrosis





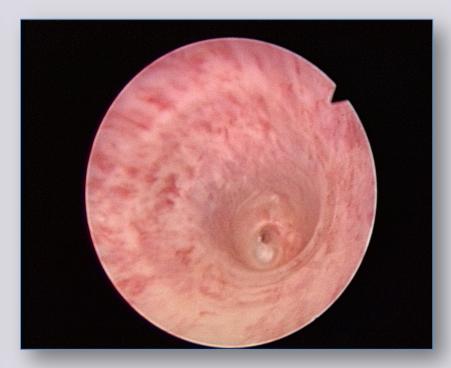




# **Urethroscopy**

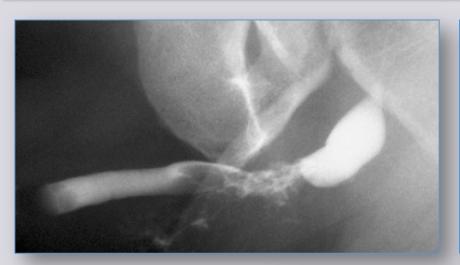


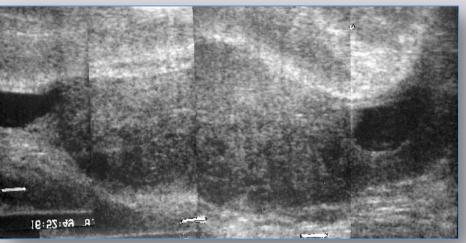
Non-obliterative

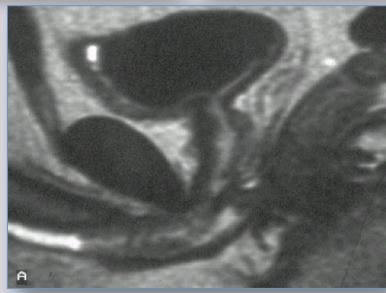


obliterative

### **MRI**









Register now!

www.webon.uretra.it