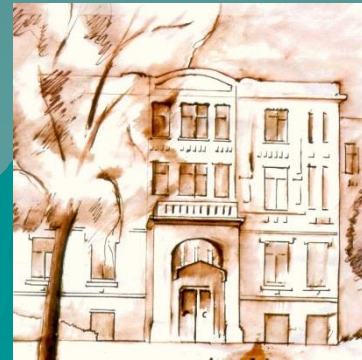


# UROLOGY

## INTRODUCTION LECTURE

Péter Nyirády

Dept. of Urology  
Semmelweis University  
Budapest



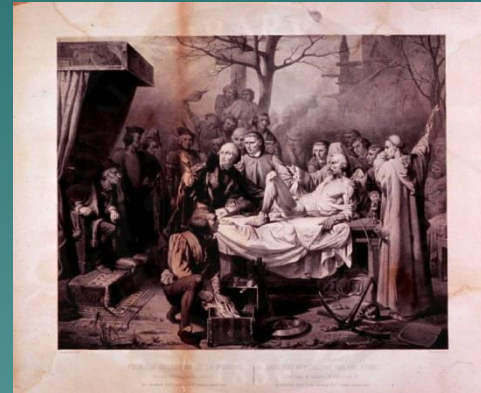
# UROLOGY

- ◆ 8 p.c. of all disorders are of urological nature
- ◆ Urological congenital disorders: >50% of all
- ◆ The majority of infections is urogenital
- ◆ More than 75% of men over 50 are affected by prostate diseases

# History 1



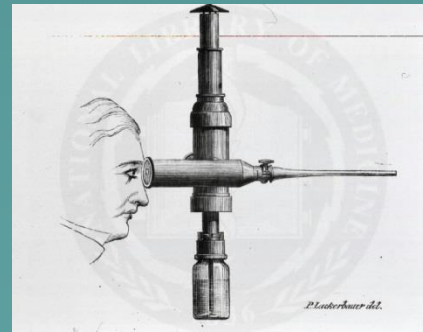
- ◆ 17<sup>th</sup> century: Frère Jaques, the stone cutter



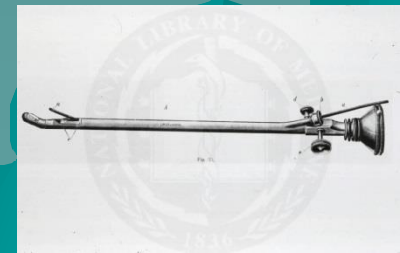
- ◆ 19<sup>th</sup> century: cystoscope



Desormeaux  
1853



Nitze



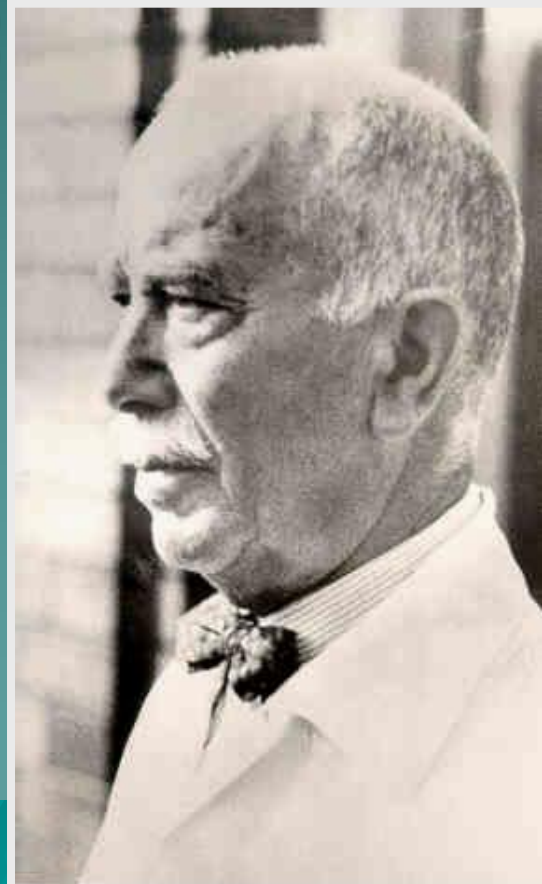
Bozzini

# History 2

- ◆ 1890: Guyon, Paris: detachment from surgery
- ◆ 1920: Géza Illyés, Budapest: No.2 urology faculty in Europe

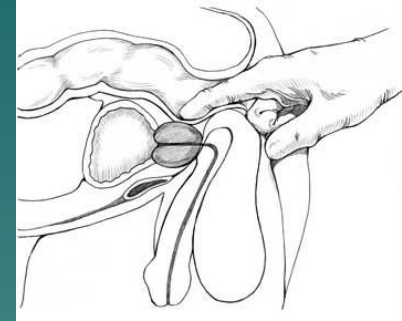


today: 60  
departments  
in Hungary



# Diagnostics

- ◆ Pt's history
- ◆ Physical examination
- ◆ Lab tests



urine: color, transparency, smell  
specific gravity, pH  
protein, pus, sugar, ubg  
sediment, bacteriology

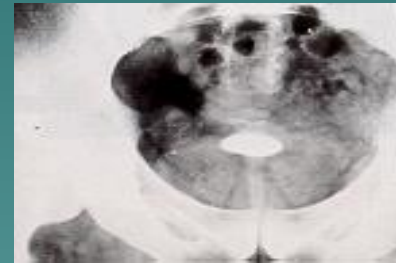
serum: blood count, renal function  
ions, blood gas analysis,  
tumor-markers, PSA etc.

# Diagnostics

## ◆ Imaging techniques

### 1) plain X-ray

- renal contours, psoas shadow
- radiopaque pathology



### 2) excretory (iv.) urography

- function
- renal configuration  
(congenital anomalies,  
stone, infection,  
masses etc.)

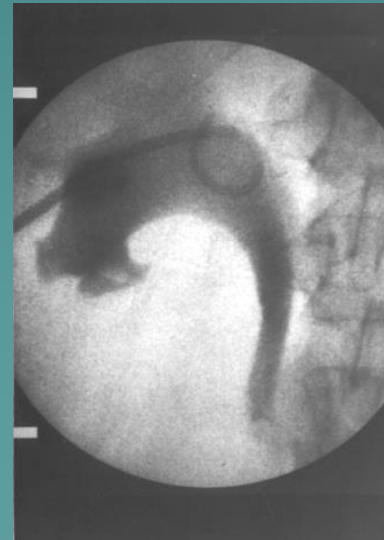


# Imaging

3) retrograde ureteropyelography



4) antegrade pyelography  
(=nephrostography)



# Imaging

5) cystography



6) urethrography





# Imaging

## 7) angiography



- selective arteriorenography

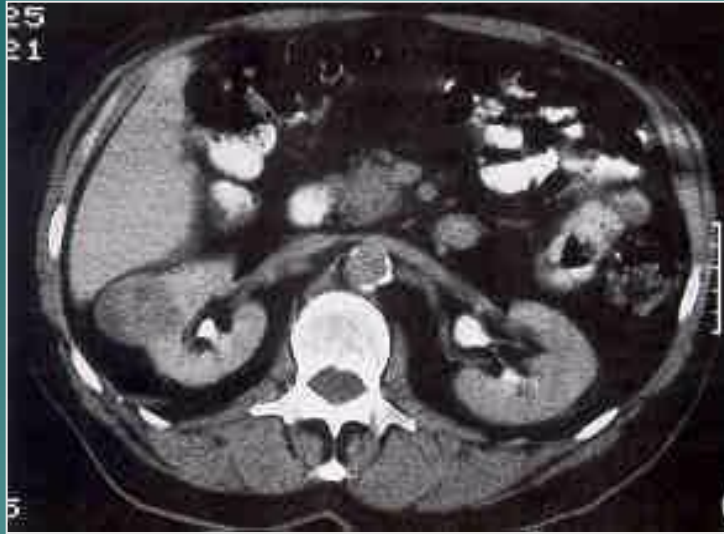


## 8) cavography

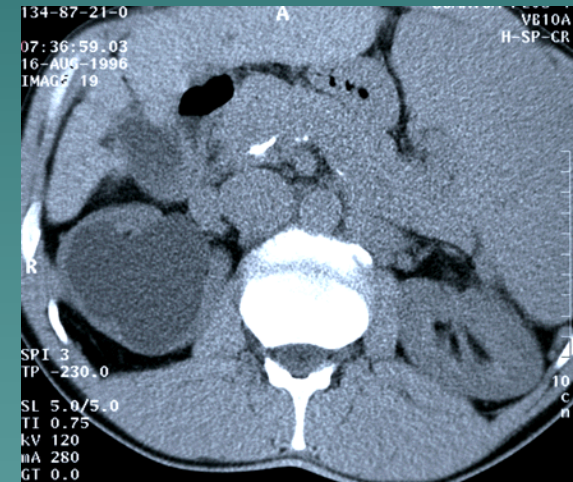


# Imaging

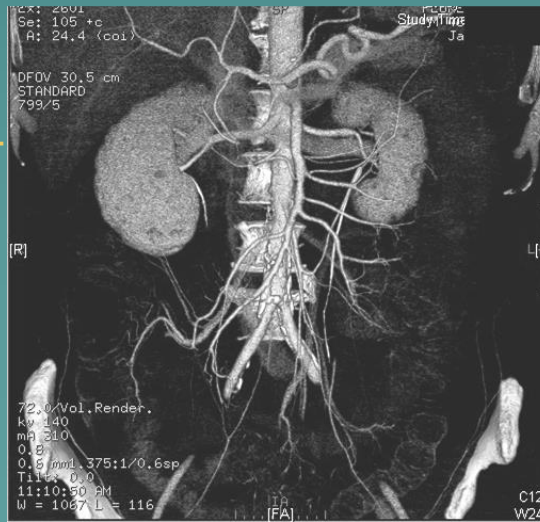
## 9) CT



## Spiral CT



## Angio CT

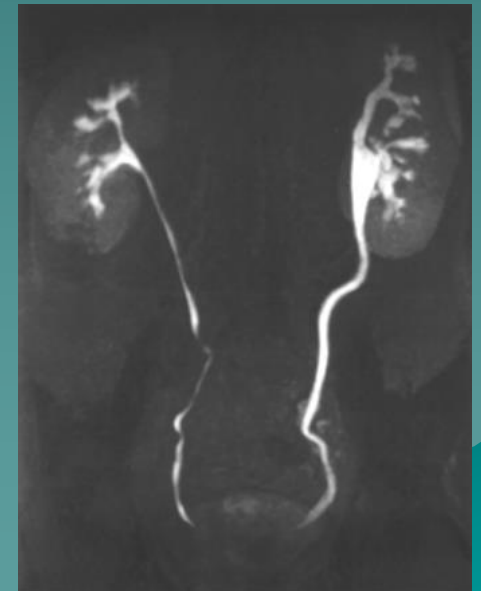


# Imaging

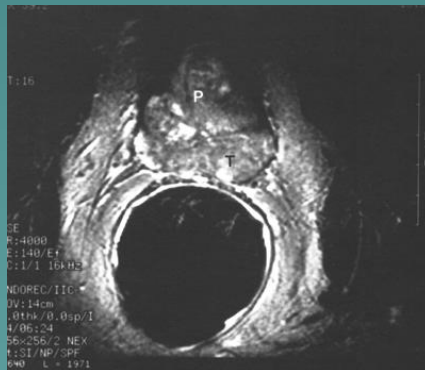
## 10) MR



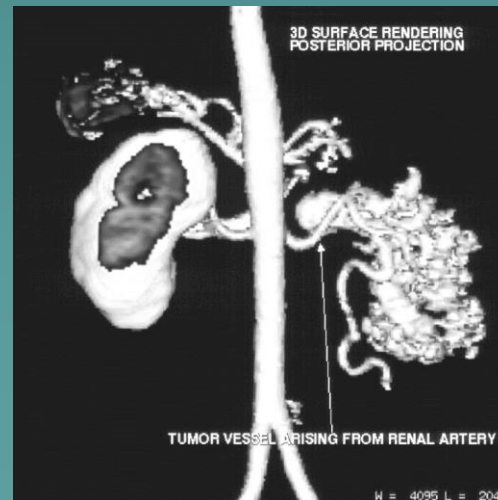
## MR-urography



## MR-coil

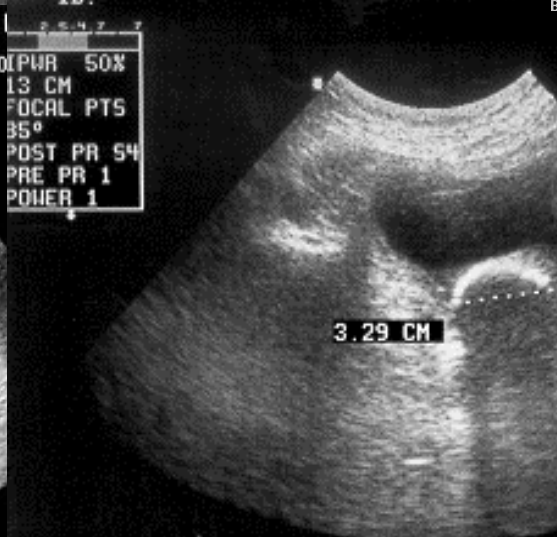


## MR-angiography

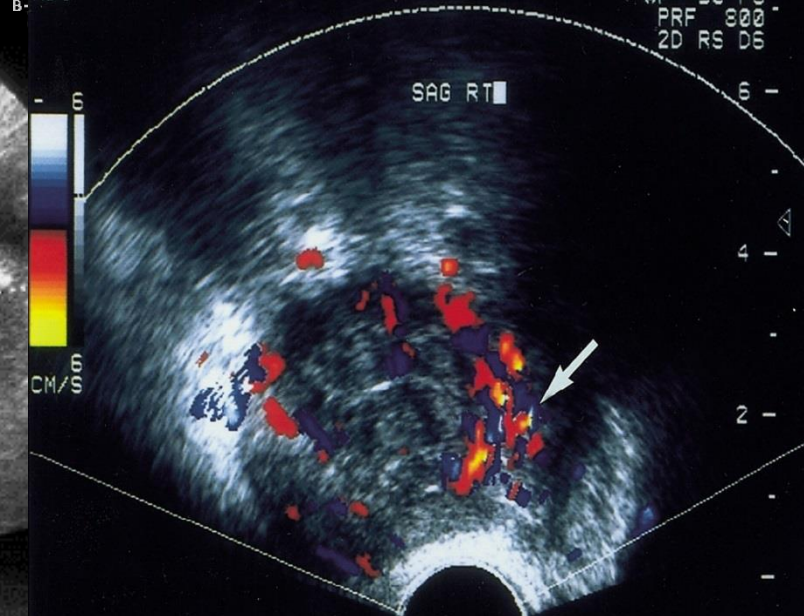
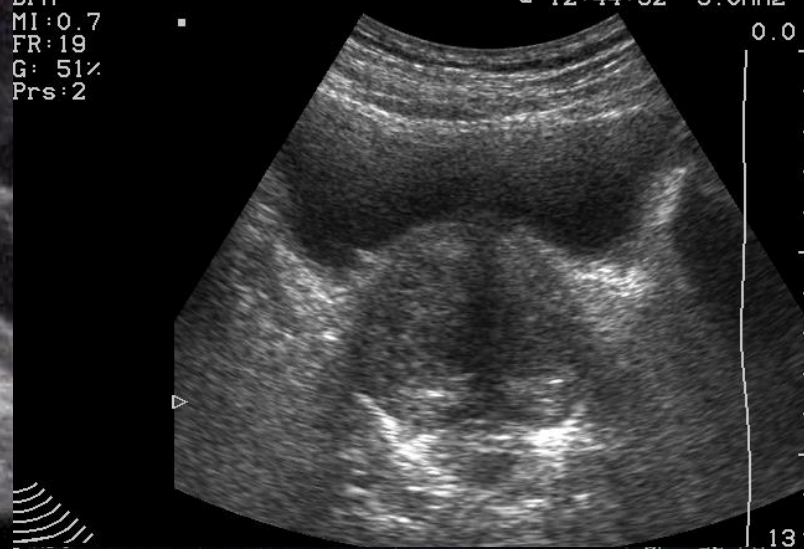


# Diagnostics

## 11) ultrasonography



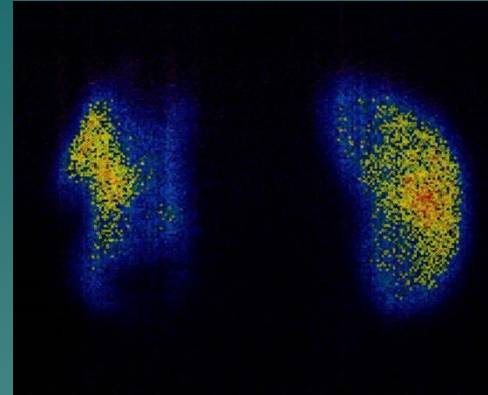
SEMMELWEIS UNIV.UROLOGIAI KLINIKA 2002-05-08 8665 \*  
BPH  
MI:0.7  
FR:19  
G: 51%  
Prs:2



# Diagnostics

12) isotope

- renal scintigraphy



- bone scan

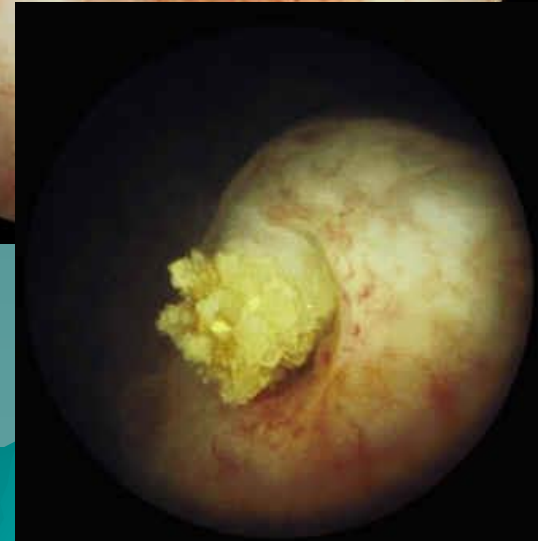
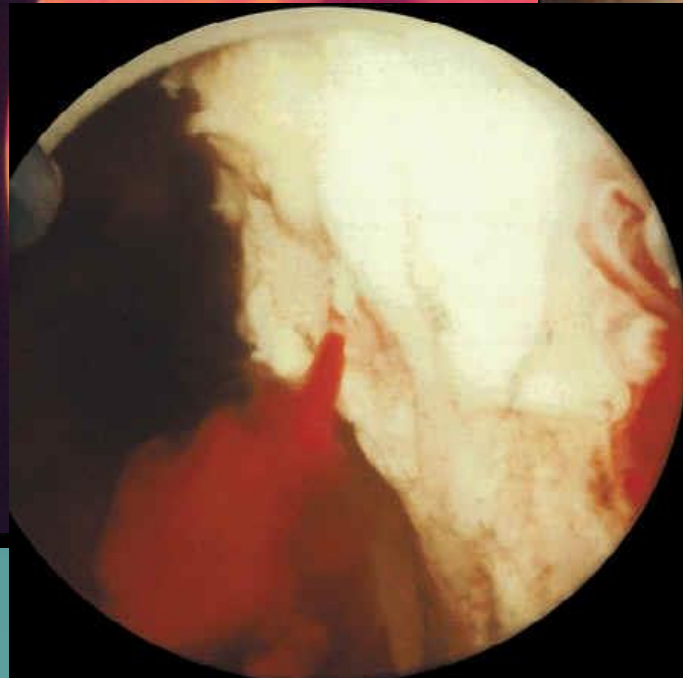
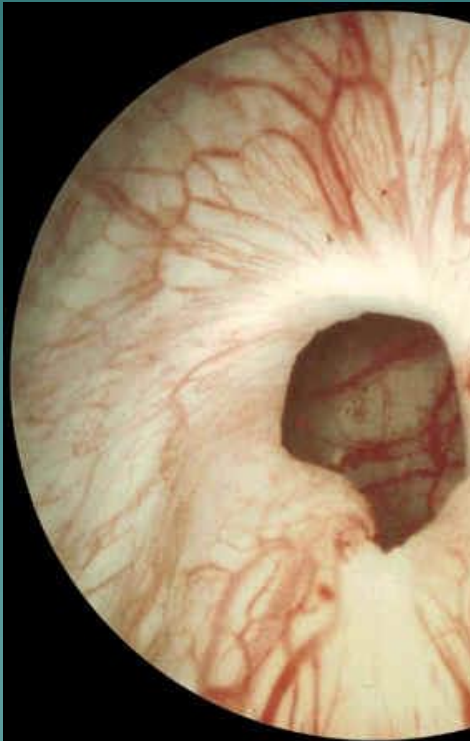
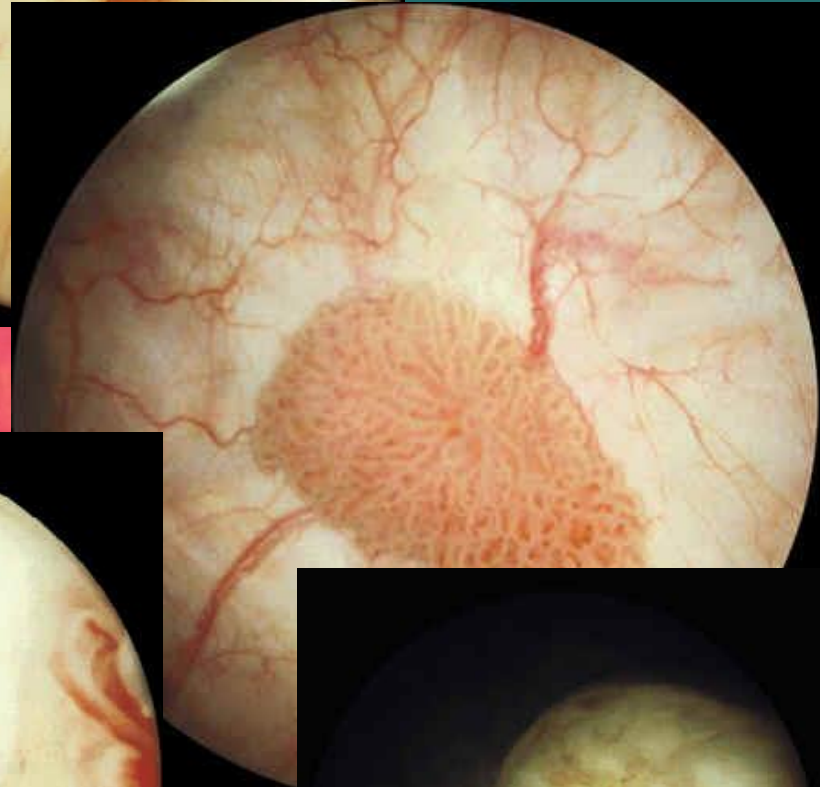
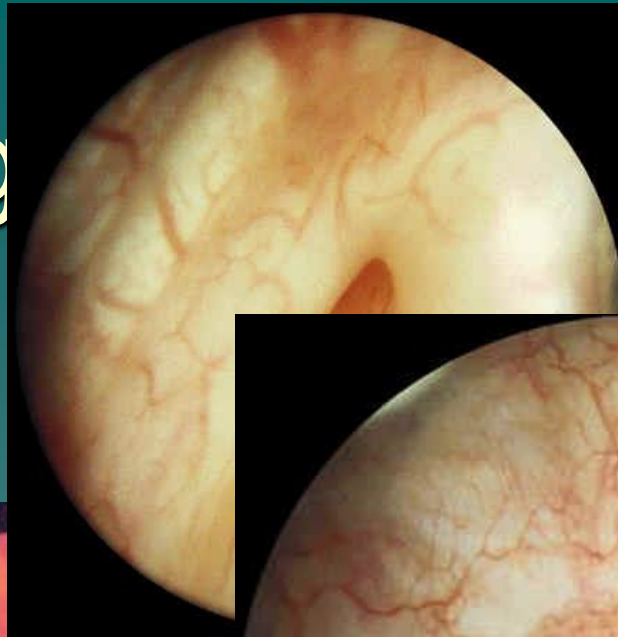
*Bone scintigraphy*



# Diag

## ◆ Endoscopy

1) urethrocystoscopy



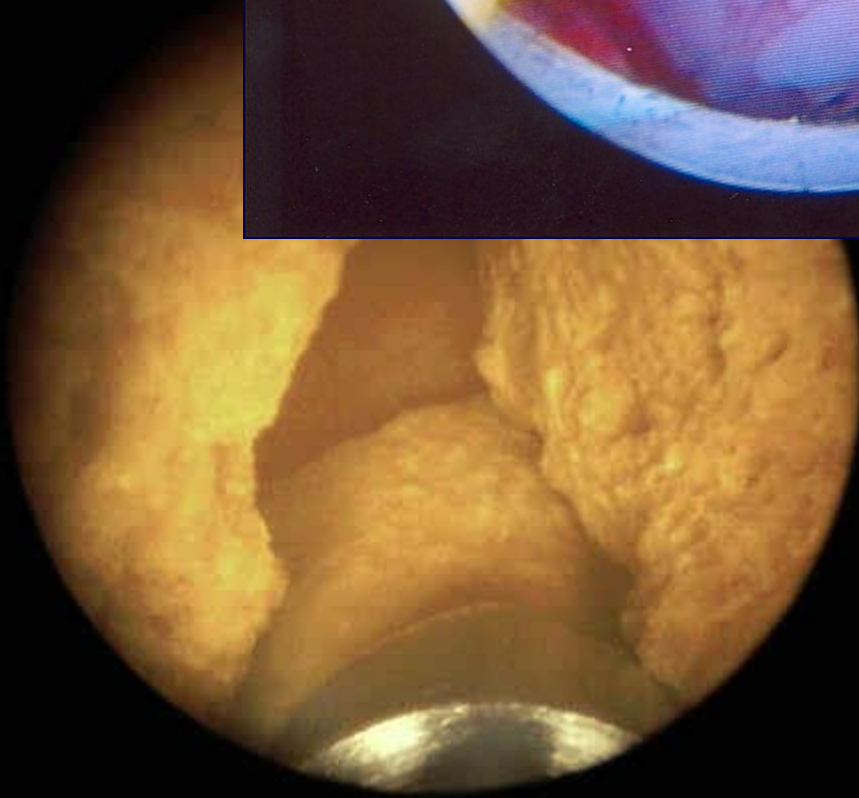
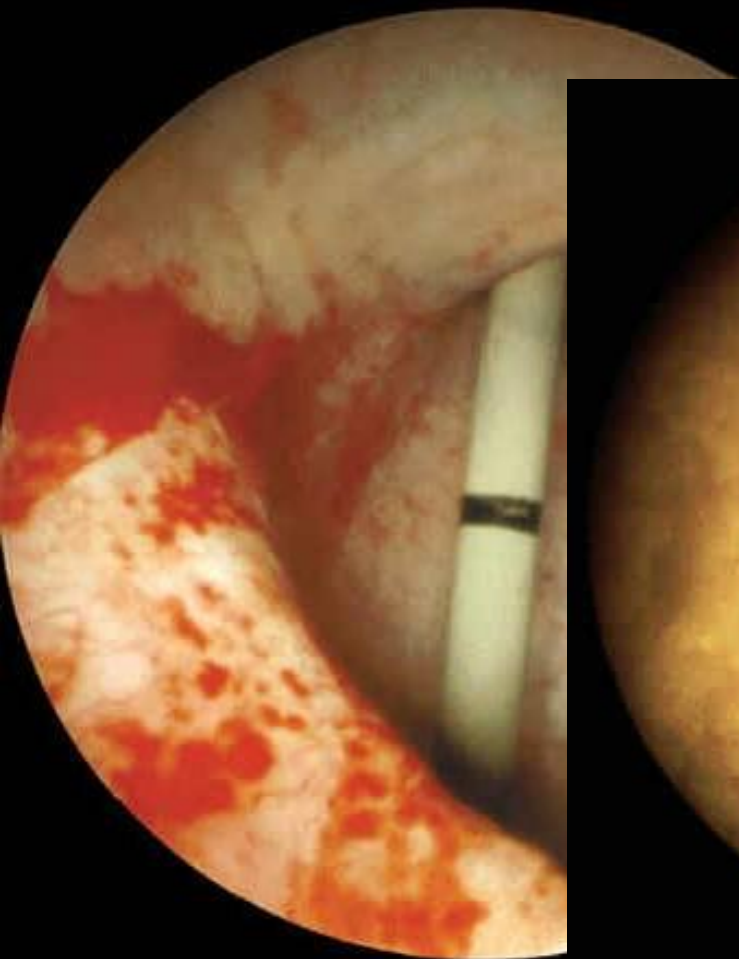
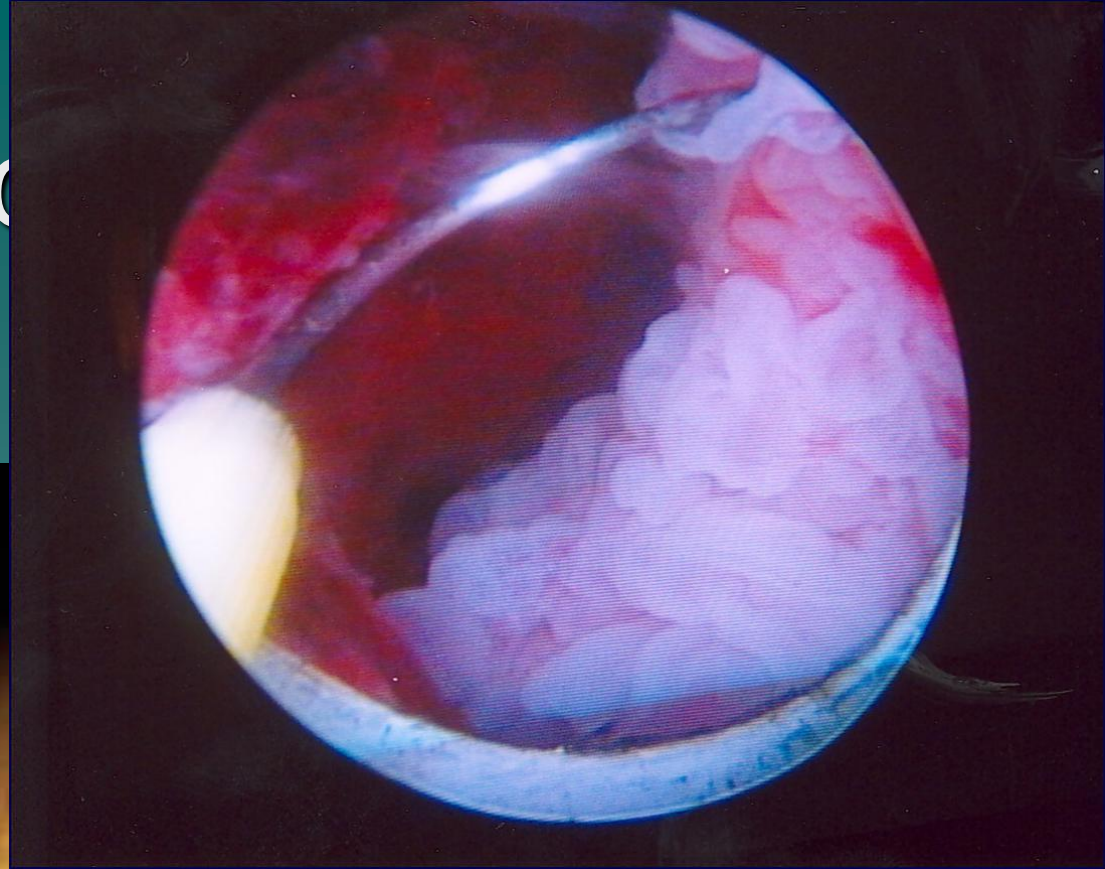
# Endoscopy

## 2) ureteroscopy (URS)



Endo

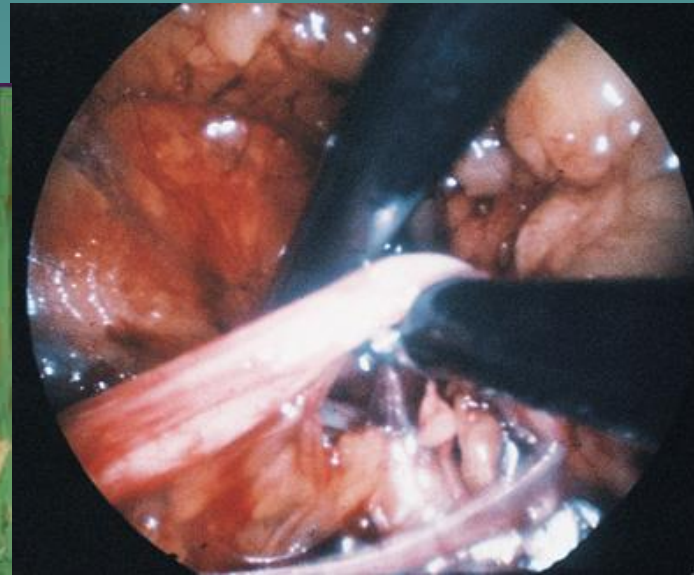
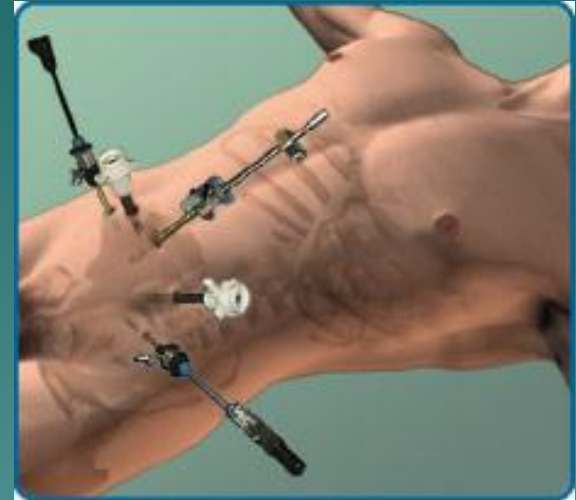
3) nephroscopy





# Endoscopy

## 4) laparoscopy



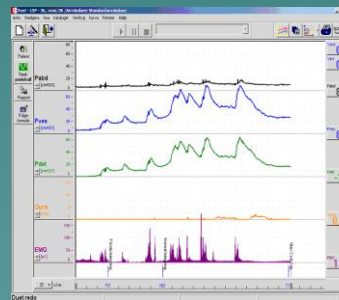
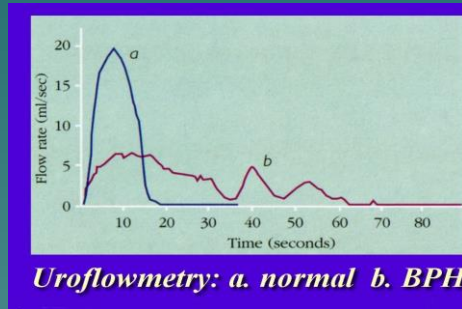
# Diagnostics

## ◆ Urodynamics

1) lower urinary tract

- uroflowmetry

- cystometry



2) upper urinary tract

- intrapelvic pressure-flow studies

# Diagnostocs

## ◆ Biopsy

