

Study day: Clinical cases in urodynamics

A morning with Paul Abrams

Case presented by: Carlos Müller Arteaga
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Detailed clinical history

- 33 year old woman.
- Recurrent urinary tract infections.
- Non significant previous history. 0G/0P
- Normal physical examination.
- Empirically treated with anticholinergics for episodes of polyuria.

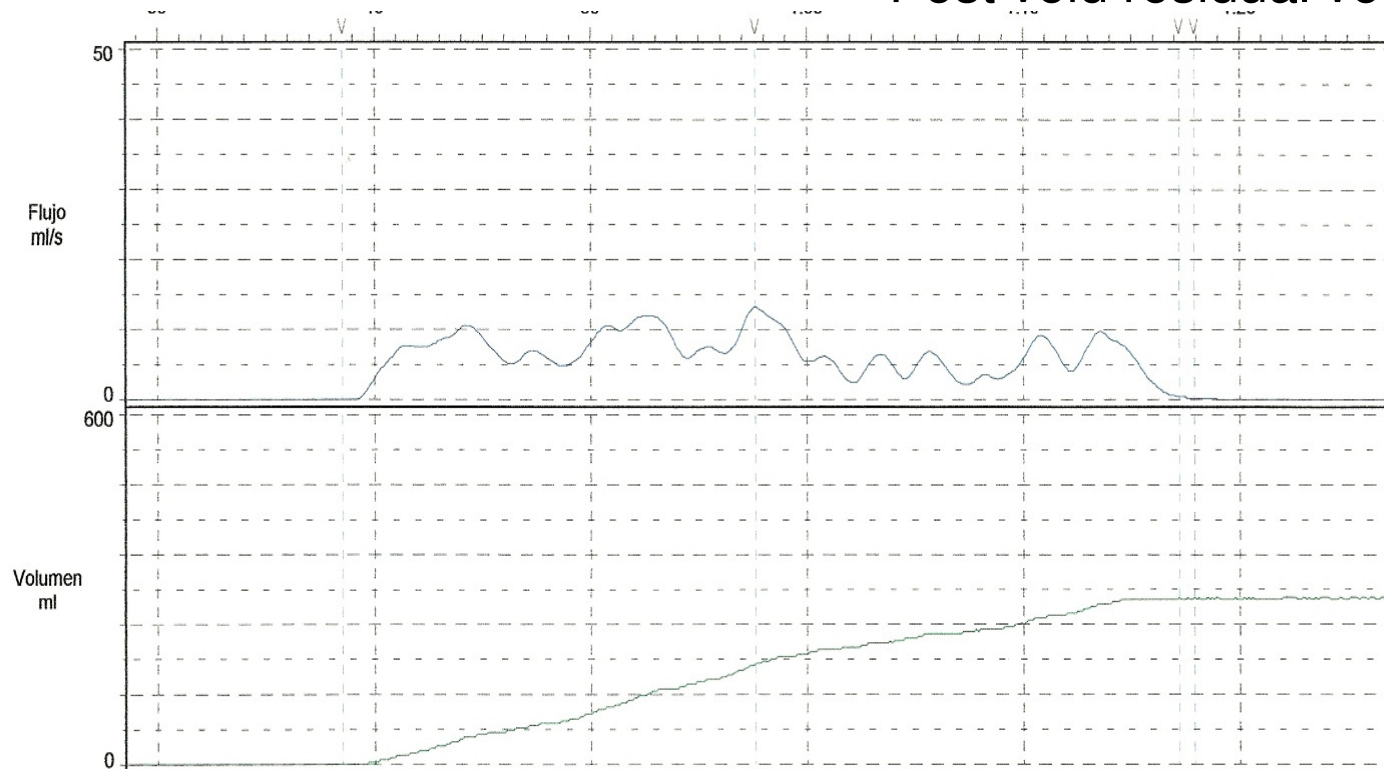
Complementary test

- Urinalysis (+) E. coli
- Provides reports:
 - Pelvic/ abdominal ultrasound / CT / MRI scan: normal.
 - Cystoscopy: normal.

Urodynamic test: Uroflowmetry

Tracing

- Qmax 13.3 ml/s
- Voided Volume 286.3ml
- Post void residual volume 250ml



Urodynamic test: Cystometry

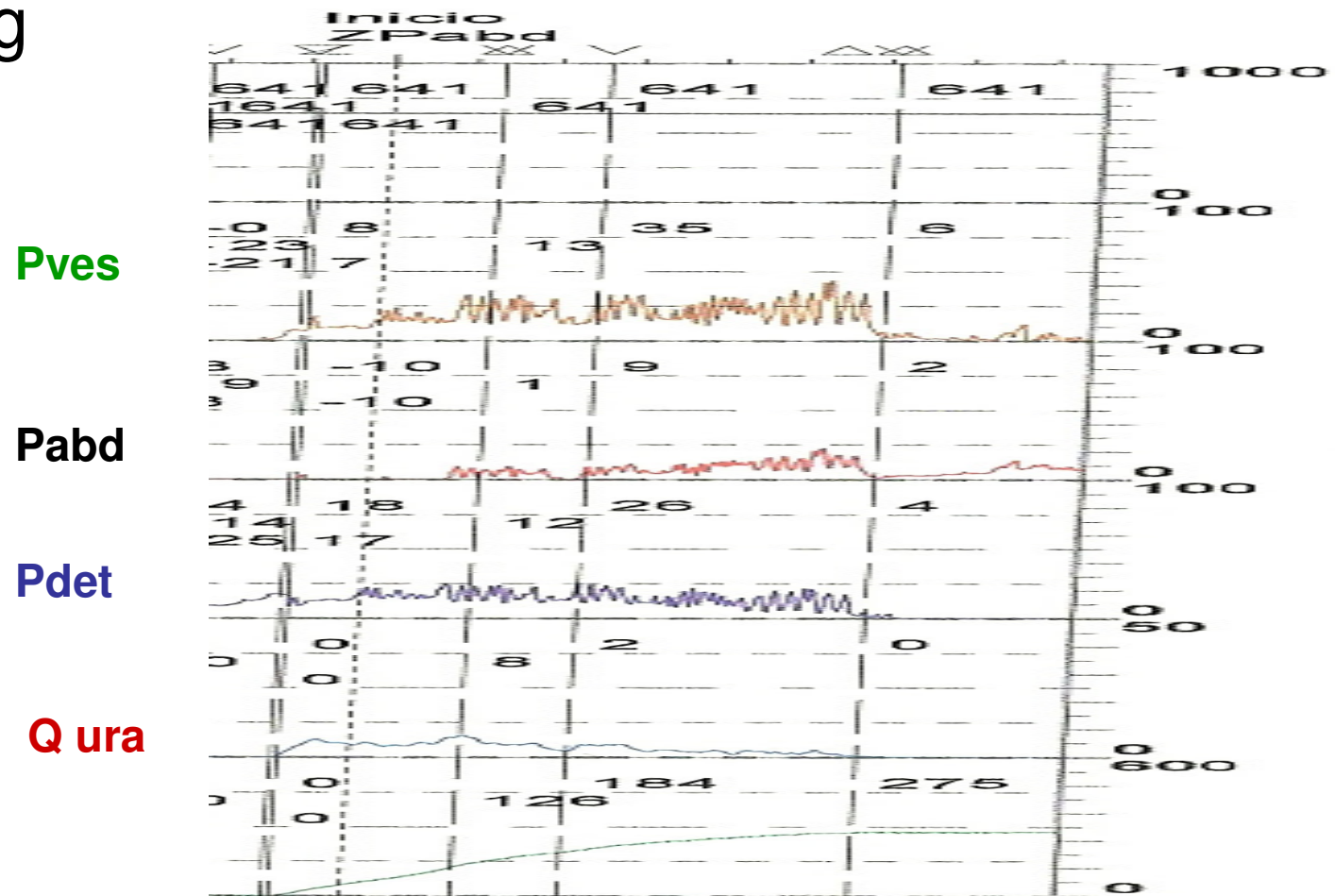
- **Result**
 - Max Cyst Cap 640 ml (without urgency).
 - First desire 175 ml.
 - Involuntary detrusor contractions (Pdet 16- 22 cmH₂O).
 - No leakage
 - Normal compliance.

Urodynamic test: Cystometry

- **Comment**
 - High cystometric capacity
 - Decreased filling sensation.
 - Detrusor overactivity.

Urodynamic test: Pressure/Flow Study

Tracing



Urodynamic test: Pressure/Flow Study

- **Result**
 - Qmax 8 ml/s
 - Pdet 20 cmH₂O
 - Post voided Volume 370 ml.

Urodynamic test: Pressure/Flow Study

- **Comment**
 - Low urine flow
 - High post voided volume

Diagnostic approach

- Filling phase:
 - Detrusor overactivity.
 - High bladder capacity.
- Emptying phase:
 - Outlet obstruction vs low contractility in women

Questions

- Hypocontractility Vs outlet obstruction in the emptying phase?
- Discuss urodynamics (according to GUP).