

Study day: Clinical cases in urodynamics
A morning with Paul Abrams

Clinical case presented by: Dr. Argimiro Collado
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Detailed clinical history

- Man 60 years old.
- Daytime urinary frequency: 3 hours.
- Nocturia: 1.
- No urgency or incontinence.

- An episode of UTI and one of hematuria.
- PSA of 1.39 and grade II of adenoma on DRE

Detailed clinical hystory

- First urination of the day:
 - Hesitancy
 - Requires use of abdominal straining in the morning.

Complementary Tests

- **Abdominal ultrasound:**

- Prostate 106 ml
- Bladder trabeculation.
- Diverticulum in bladder wall.
- Post void volume **251 ml**

Ultrasound post void residual in another session: 273 ml

IM: 1,2



SIEMENS

4C1 / *PELVIS

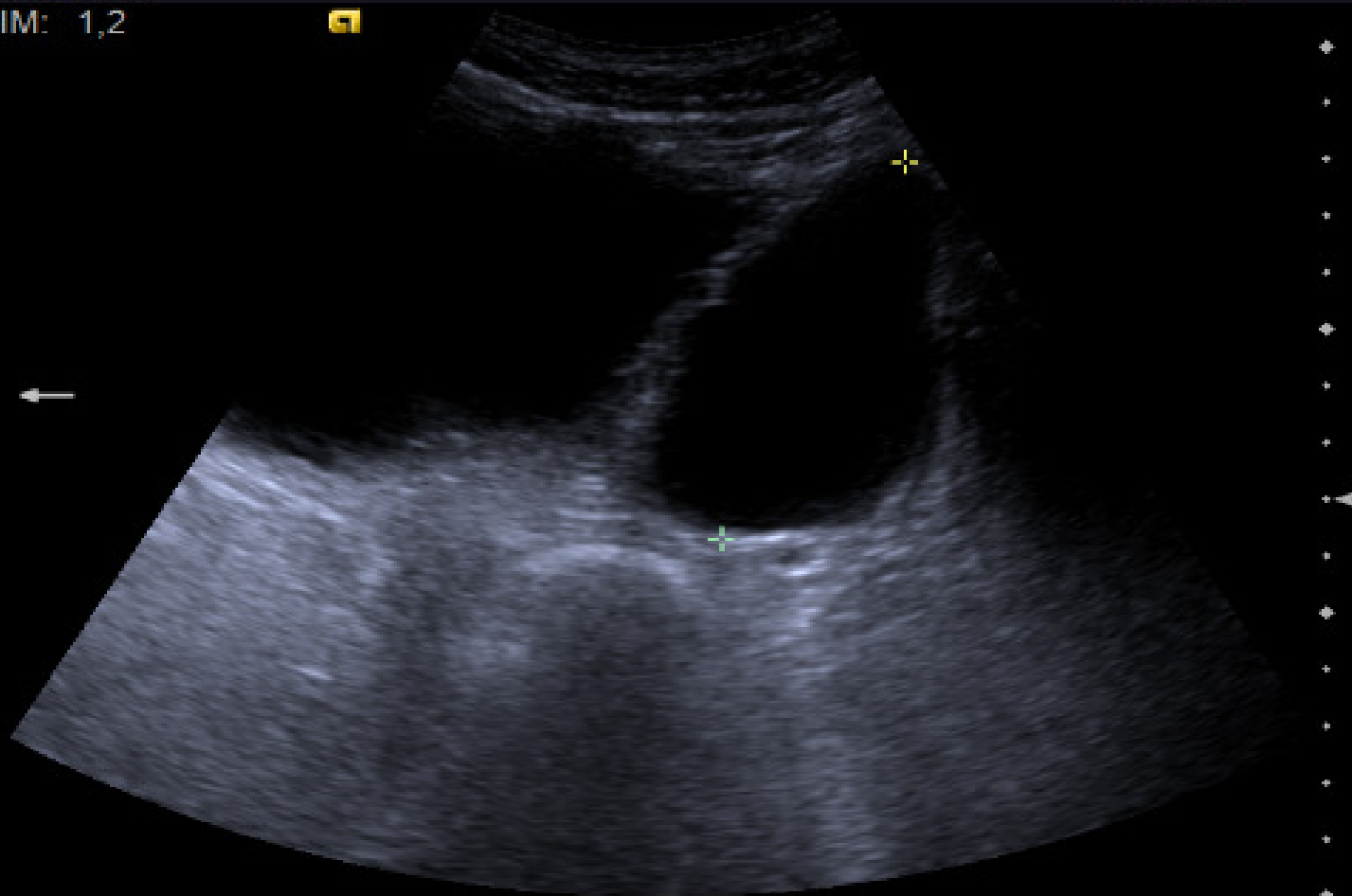
General

2D _____ 100%

THI / H4,00 MHz

-9 dB / CD 70

D=72,5 mm



Izq _

20cps

15cm

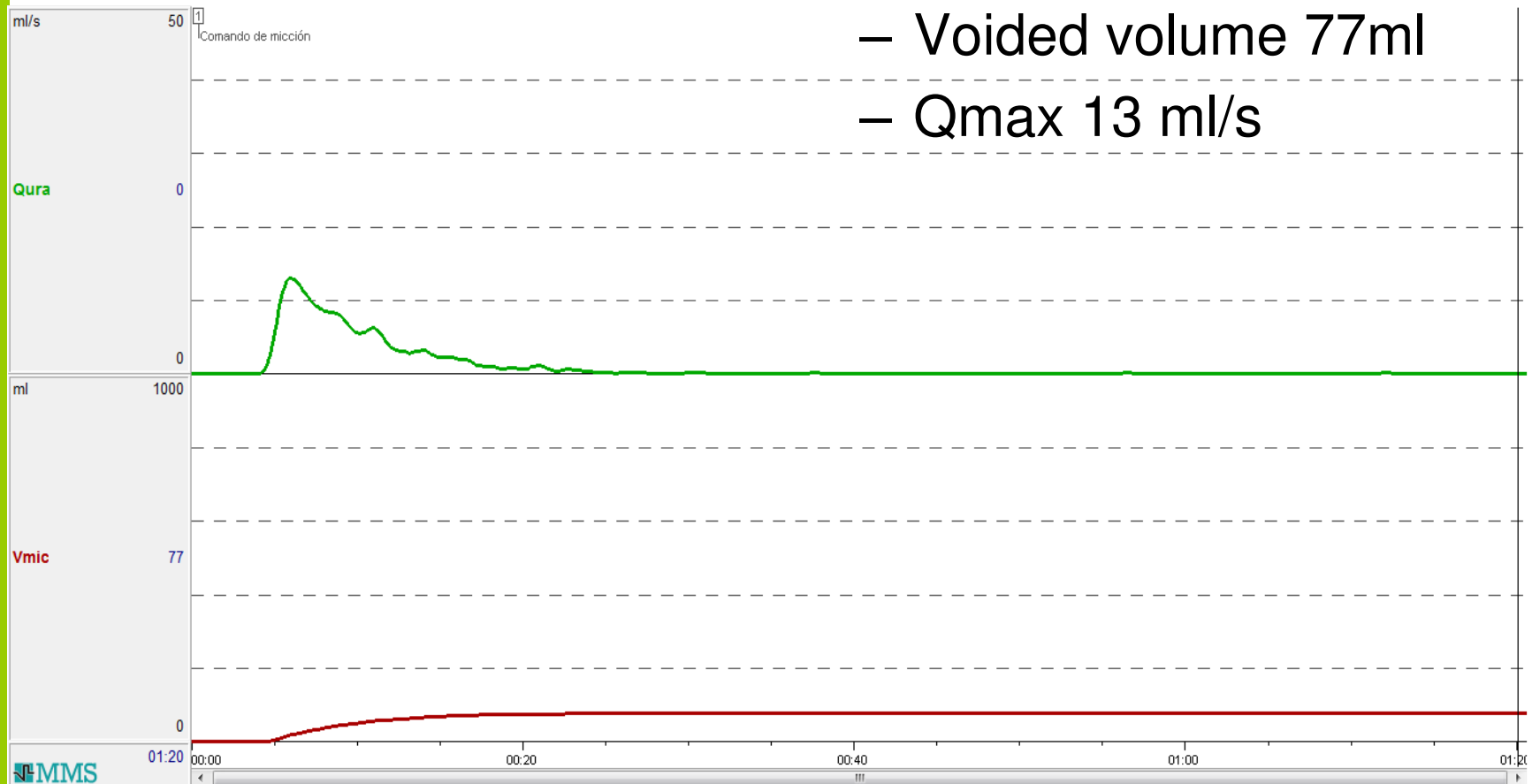
100% ← Fr72

Complementary Tests

- **Cistoscopy:**
 - Negative (in other center)

Urodynamic test: Uroflowmetry

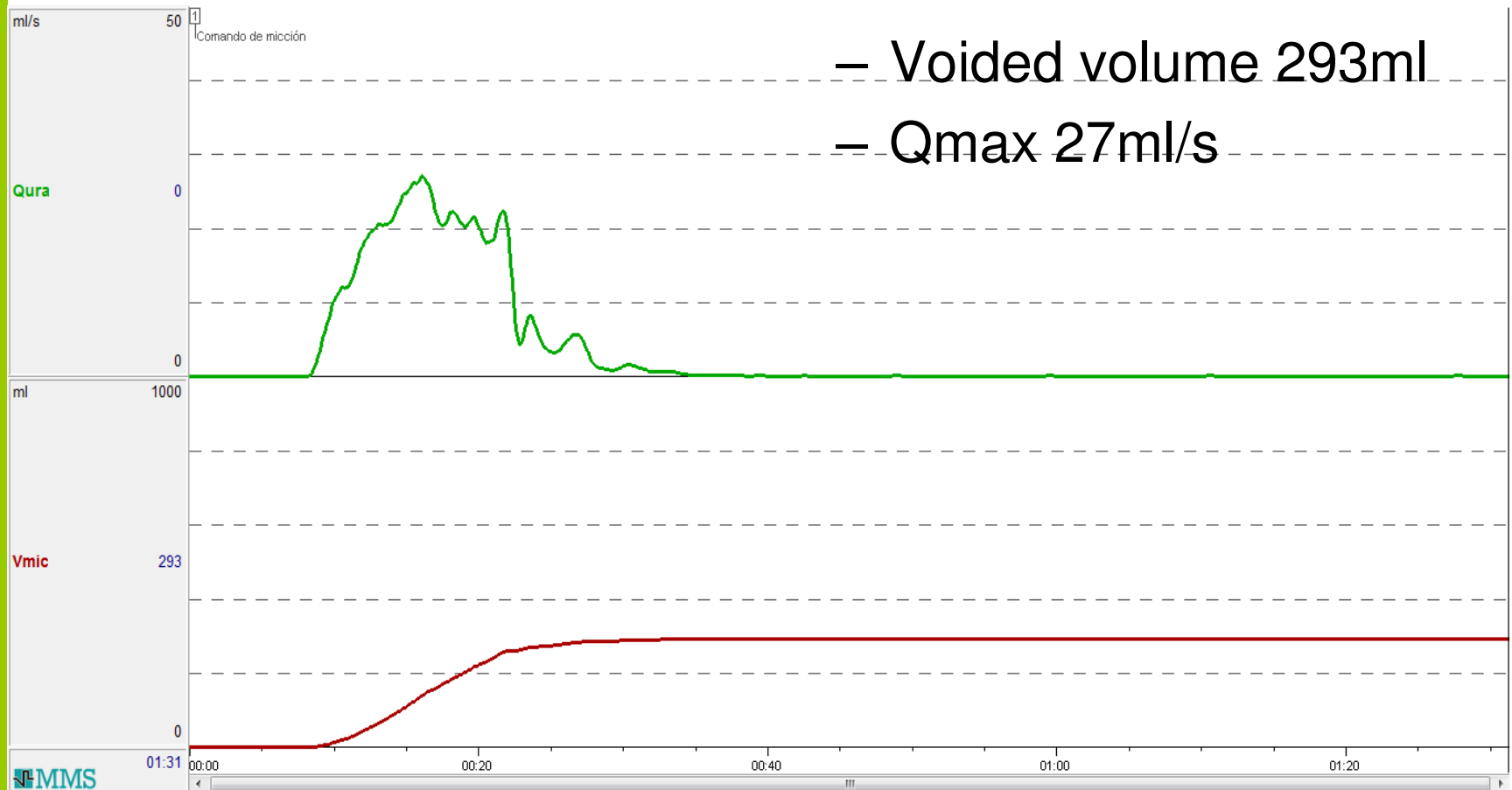
Tracing



- Voided volume 77ml
- Qmax 13 ml/s

Urodynamic test: 2nd Uroflowmetry

Tracing



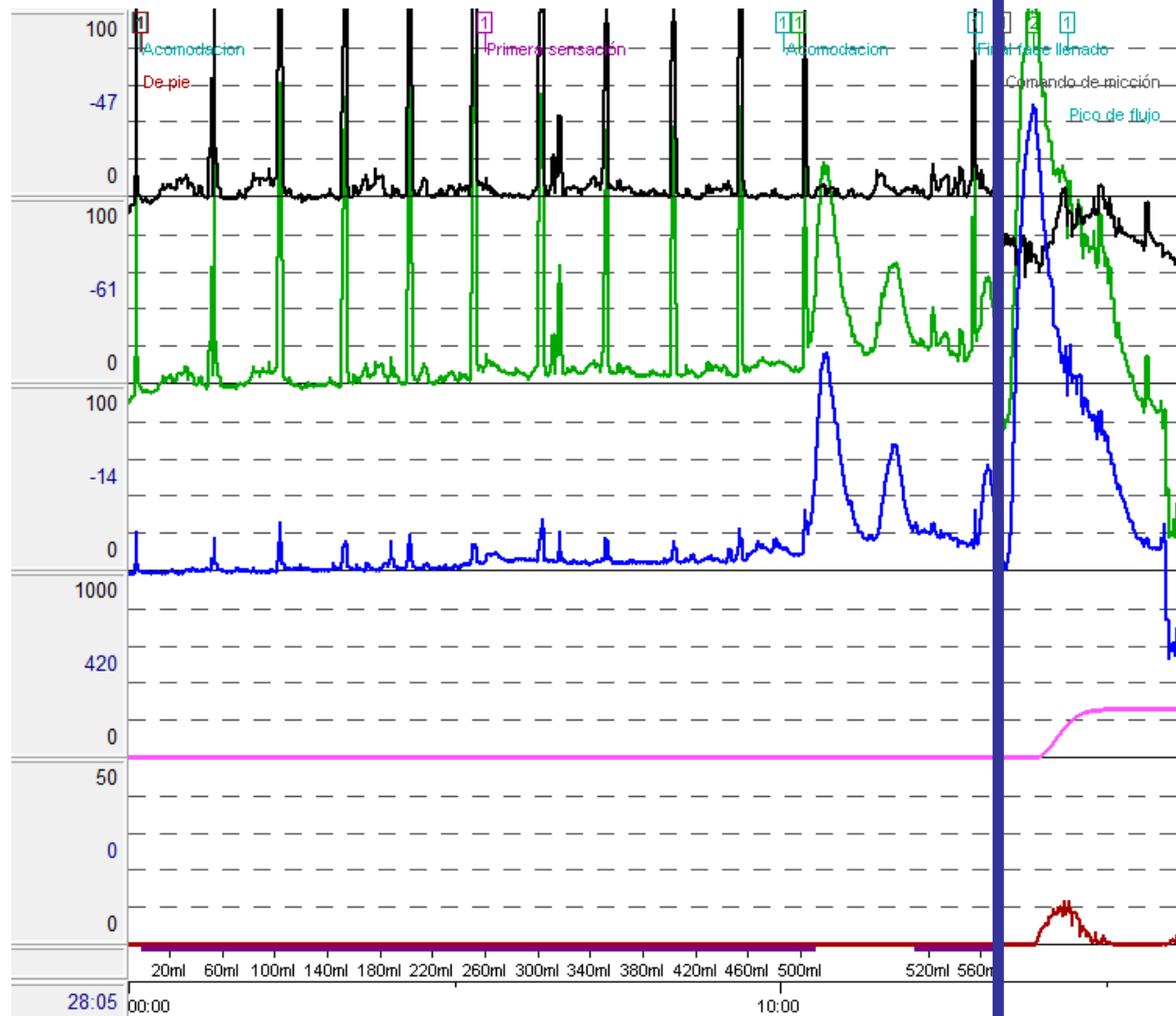
Urodynamics: Cystometry

Tracing

Pabd

Pves

Pdet



Urodynamics: Cystometry

- **Result**

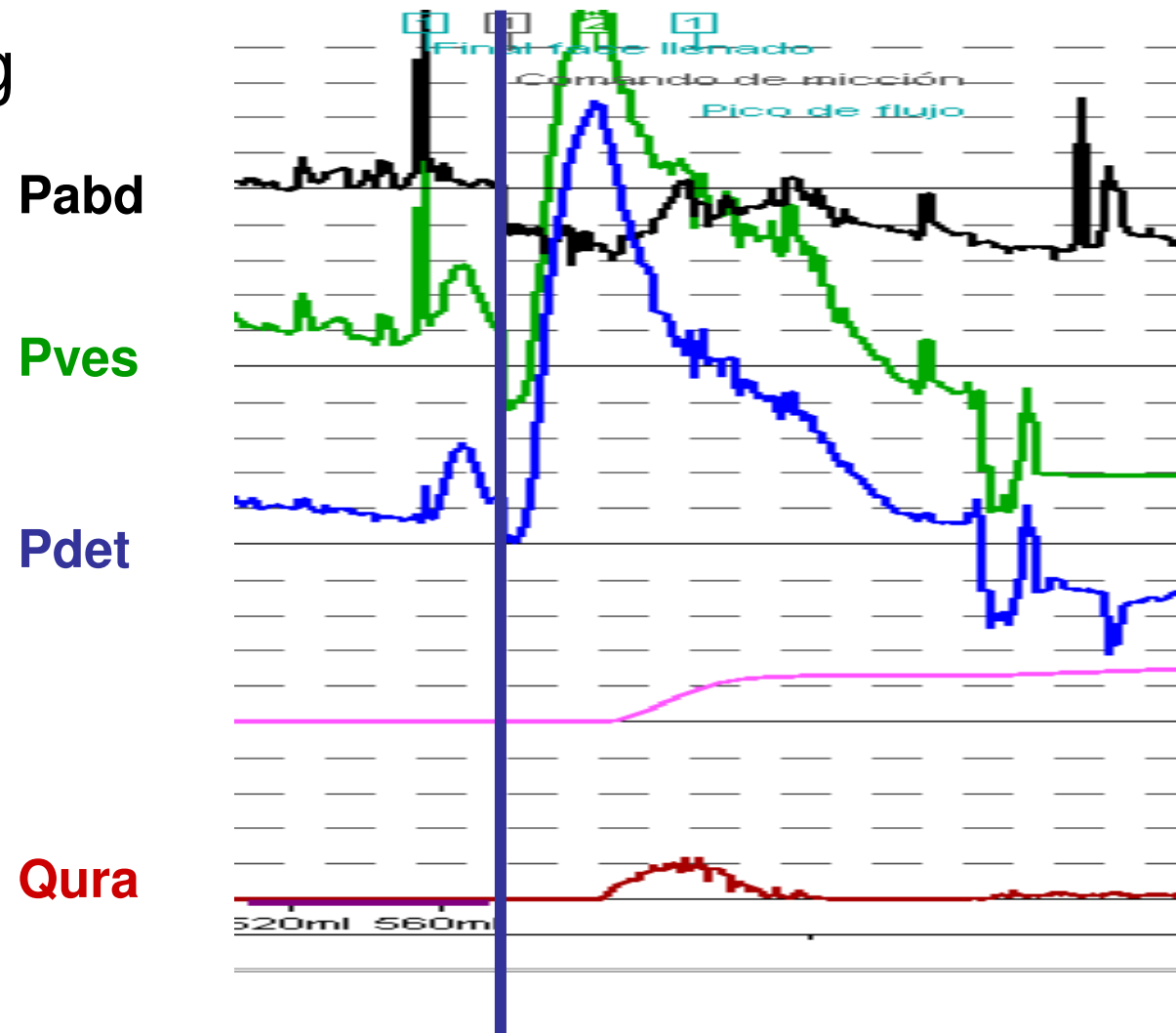
	Infused Vol	P ves	P det
First Desire	262 ml	16 cmH ₂ O	8cmH ₂ O
Max. Cysto. Cap.	574 ml	21 cmH ₂ O	14cmH ₂ O

Urodynamics: Cystometry

- **Comment**
 - Normal bladder capacity
 - Progressive increase of Pdet since 250ml
 - Un-inhibited detrusor contractions

Urodynamic test: Pressure/Flow Study

Tracing



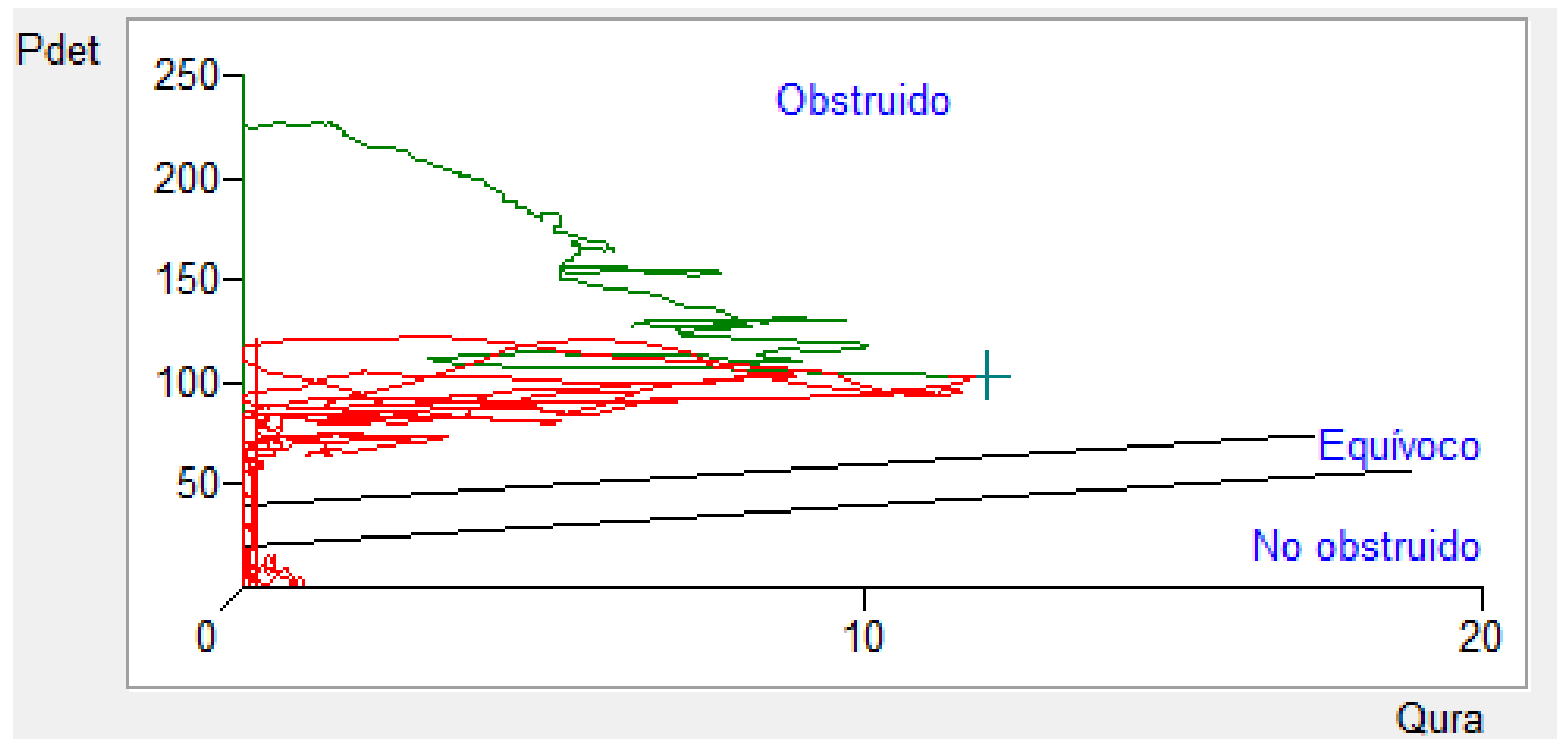
Urodynamic test: Pressure/Flow Study

- **Result**

- Qmax 12 ml/s
- Pdet at Qmax 106 cmH₂O
- Void Volume 420 ml
- Post Voided Residual 143 ml

Urodynamic test: Pressure/Flow Study

- **P/ Q plot**



Urodynamic test: Pressure/Flow Study

- **Comment**
- **First part of micturition**
 - Contractile detrusor: obstruction
- **Second part of micturition**
 - Use of abdominal straining
 - High post voided volume

Therapeutic approach

- Obstruction and overactive detrusor