

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

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Detailed clinical history

- 60 year old woman
- **Personal history:**
 - Hypertension, Cholecystectomy
- **Gynecological and obstetric history:**
 - M 12, menopause from age 52
 - G3-P1 (eutocic vaginal delivery not macrosoma)

Detailed clinical history

- **Initial complaint (2007, 60 years old):**
 - Vaginal protrusion of more than 5 years, progressive + stress urinary incontinence.

Detailed clinical history

- **Examination:**

Weight 77 kg., Height 1'64 m, BMI: 28.5

Cystocele grade 3 incontinence objectified without reducing the prolapse

Hysterocele grade 3 at the expense of long-necked

Normal preoperative ASA II

Therapeutic approach

- **Clinical Assessment:**
 - C3, H3.
 - Stress urinary incontinence.
- **Treatment:**
 - 10th sept 2008: Perigee+ Manchester+ band tension-free suburethral (Monarch).

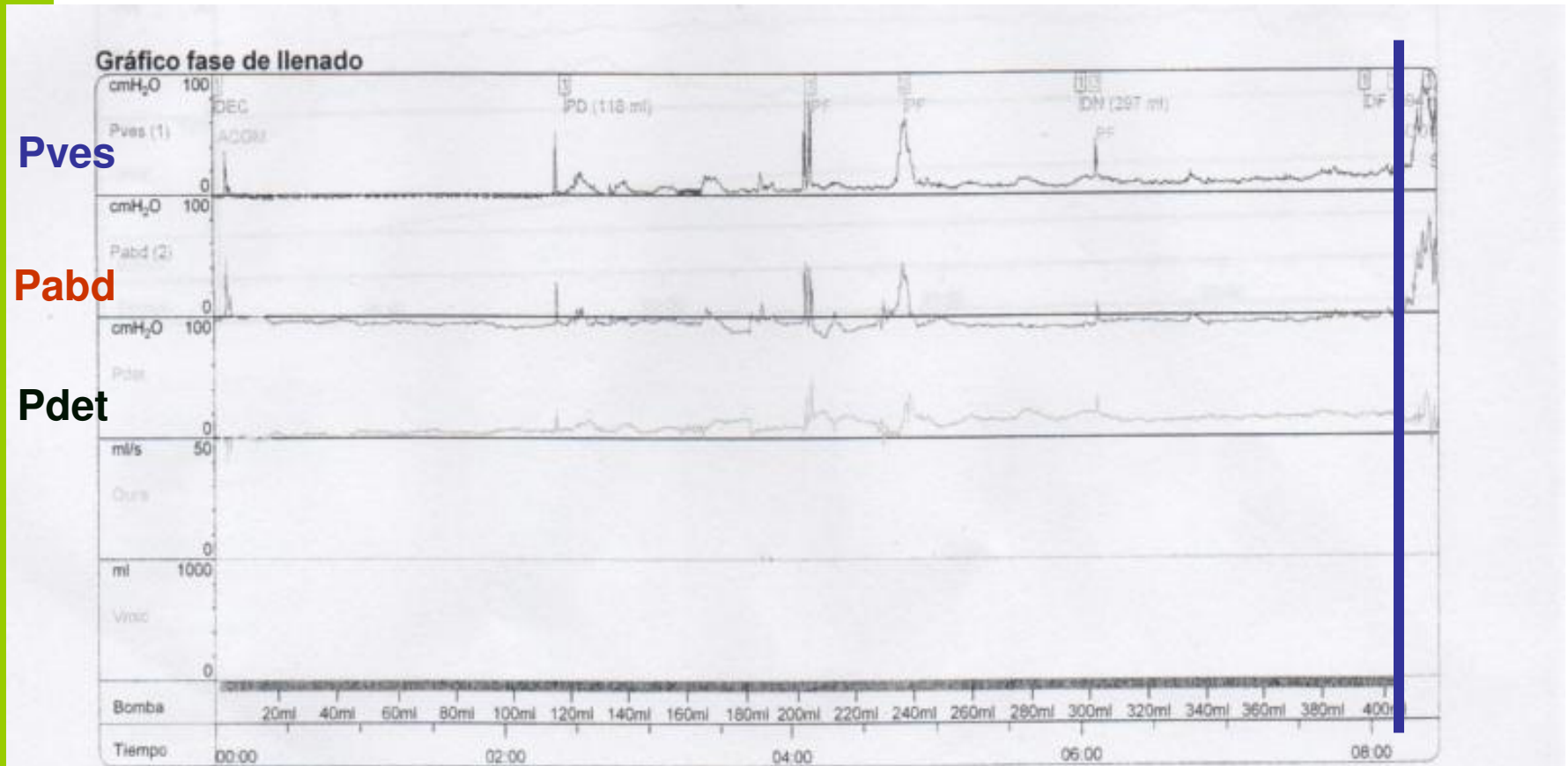
Control Visit

- **1 month:** urgency, no UI (disparity)
 - Tolterodine neo
- **7 months (april 2008):**
 - UI at minimum efforts with urgency
- **17 december 2010:**
 - Mixed incontinence grade 2, $>40^{\circ}$, negative Bonney
 - ICIQ-SF 18, Sandvik: 8 (severe UI)
 - Rectoenterocele (RE) grade 2
 - Post Void Volume 20ml
 - Waiting for physiotherapy

Therapeutic Approach

- **Clinical Assessment:**
 - Mixed urinary incontinence (Intrinsic sphincter deficiency?) grade 2
 - RE 2
- **Requested:**
 - Urinalisys: normal
 - Urodynamic Study

Cystometry



Cystometry

	<u>Vol infused</u>	<u>Pves</u>	<u>Pdet</u>
First desire	118ml	3cmH ₂ O	9cmH ₂ O
Normal desire	297ml	13cmH ₂ O	21cmH ₂ O
Strong desire	394ml	12cmH ₂ O	16cmH ₂ O

Total volume infused: 406ml

Cystometry

Leakage with increased abdominal pressure

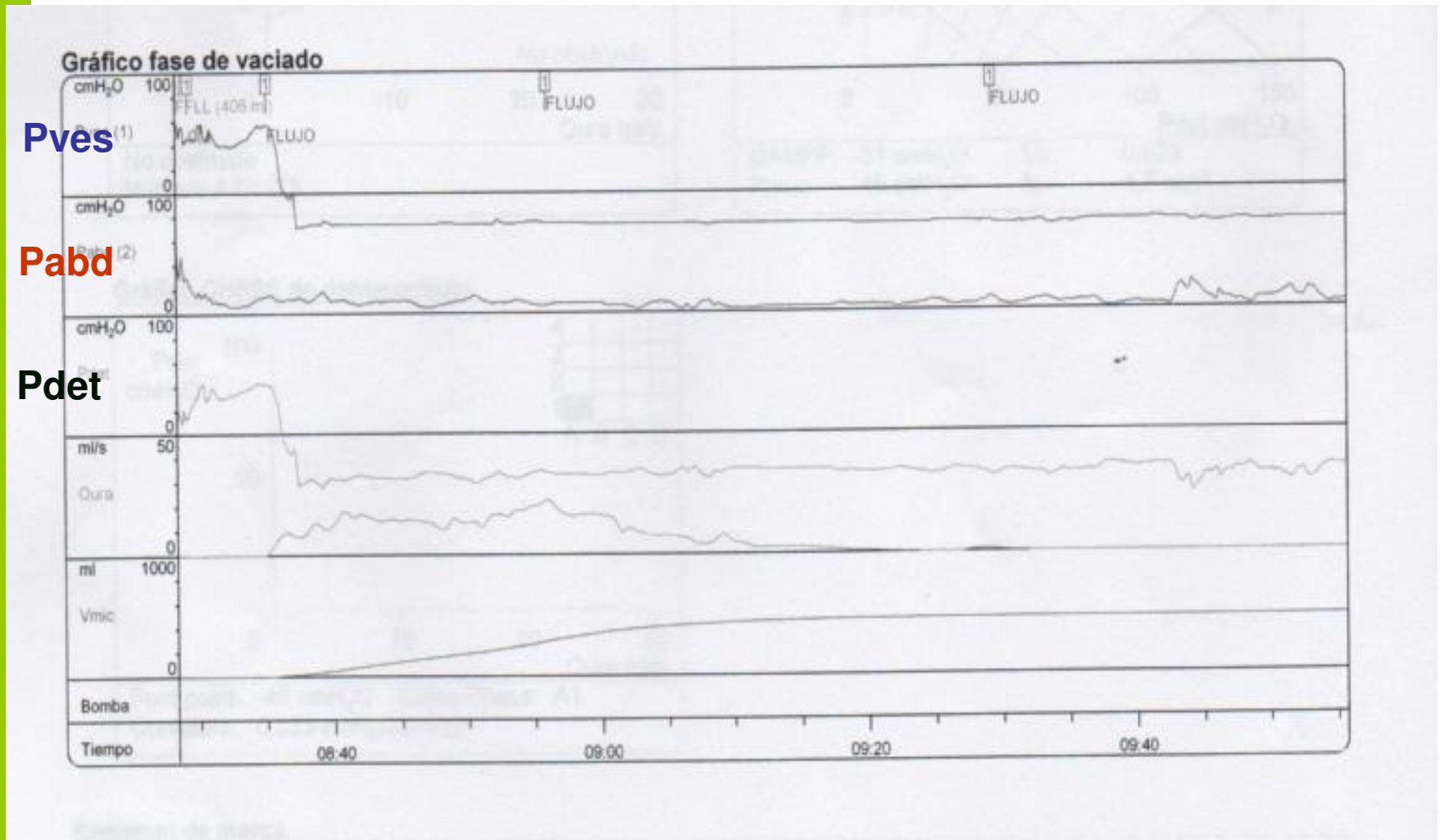
	<u>Vol infused</u>	<u>Pves</u>	<u>Pdet</u>
Leakage	204ml	73cmH ₂ O	50cmH ₂ O
Leakage	237ml	62cmH ₂ O	29cmH ₂ O
Leakage	302ml	45cmH ₂ O	34cmH ₂ O

Compliance: 23.6ml/cmH₂O

Cystometry

- **Comment:**
 - Normal capacity bladder.
 - Low compliance (24ml/cmH₂O).
 - Leakage with cough at low abdominal pressure (45cmH₂O) and volume (204 ml)
 - Absence of un-inhibited detrusor contractions.
 - Sensitive urgency (First desire 118ml)

Urodynamic test: Pressure/Flow Study



Urodynamic test: Pressure/Flow Study

- **Results:**
 - Pdet at Qmax -33 cmH₂O
 - Qmax 23 ml/s.
 - Post Void Volume: 0ml
 - Opening pressure of Pdet: 42cmH₂O
- ***Micturition mechanism: perineal relaxation***

Therapeutic approach

- SUI and intrinsic sphincter deficiency.
- Urgency, without IU, after surgery (Perigee+Monarch)
- Rectoenteroceles asymptomatic grade 2

Questions

- Should urodynamic study be done before any UI surgery?
- Which one will be the best option in this patient:
 - Anticholinergic treatment and wait for results with physiotherapy.
 - If no improvement, consider REEMEX (adjustable sling)?