



**ARIZONA CENTER FOR
CHRONIC PELVIC PAIN**

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Surgery

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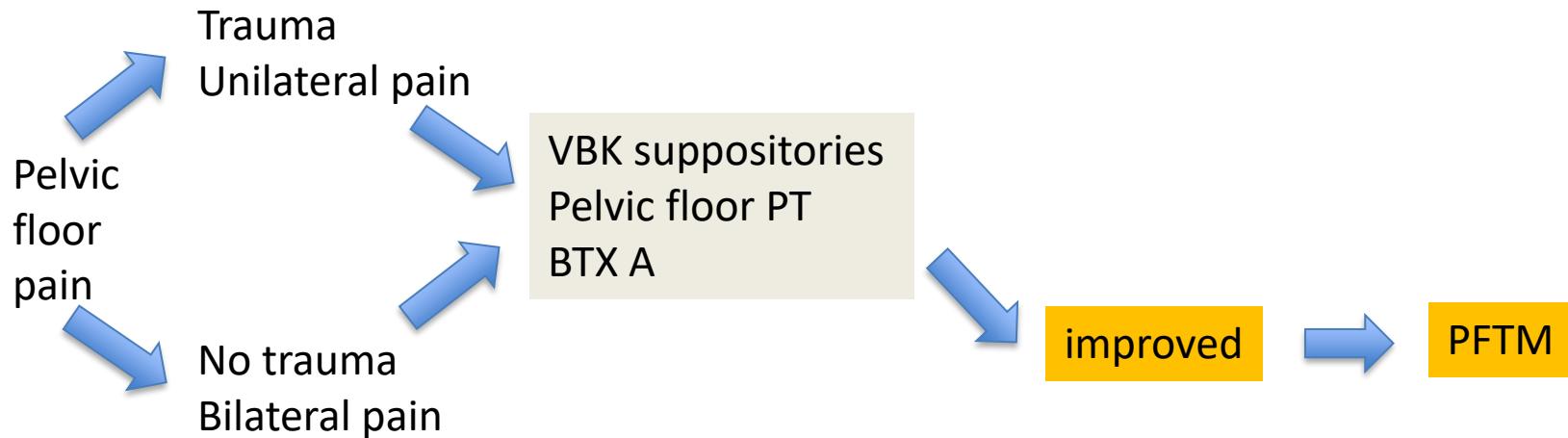
Creighton University School of Medicine



ARIZONA CENTER FOR
CHRONIC PELVIC PAIN

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My protocol



Botulinum toxin A

pain improved

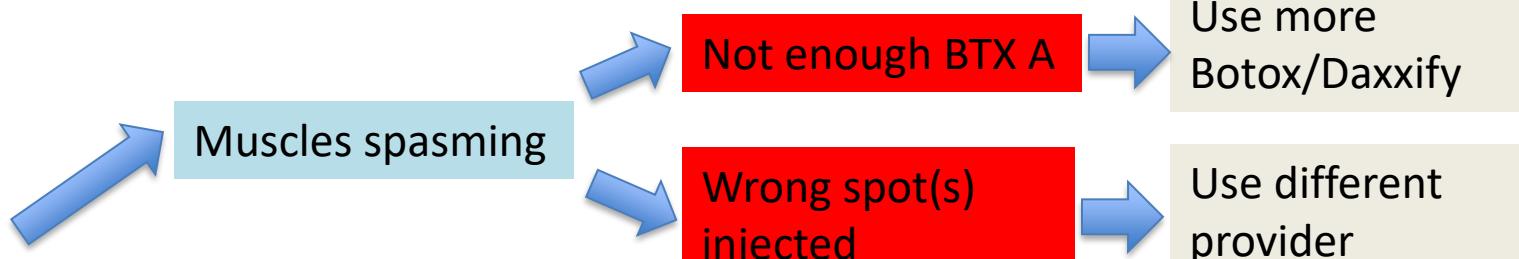


PFTM



Tx: VBK suppositories
Pelvic floor PT
Botox/Daxxify

pain not improved



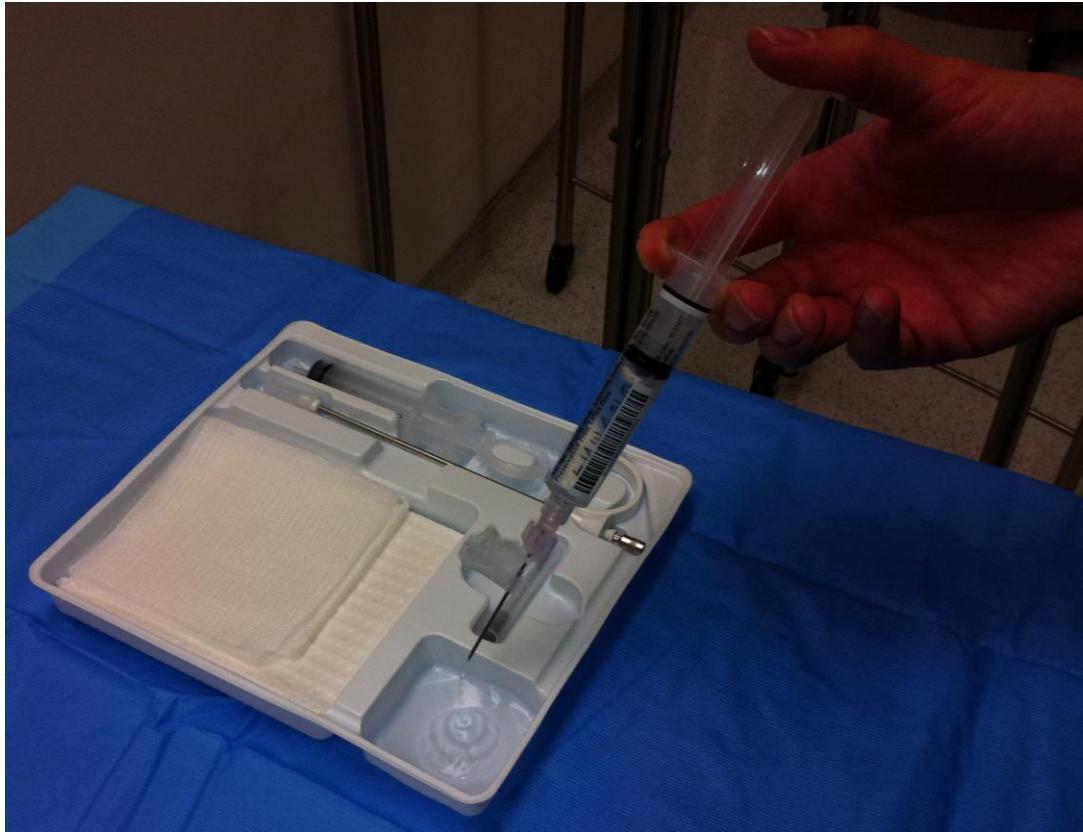
Treatment – Botulinum toxin A

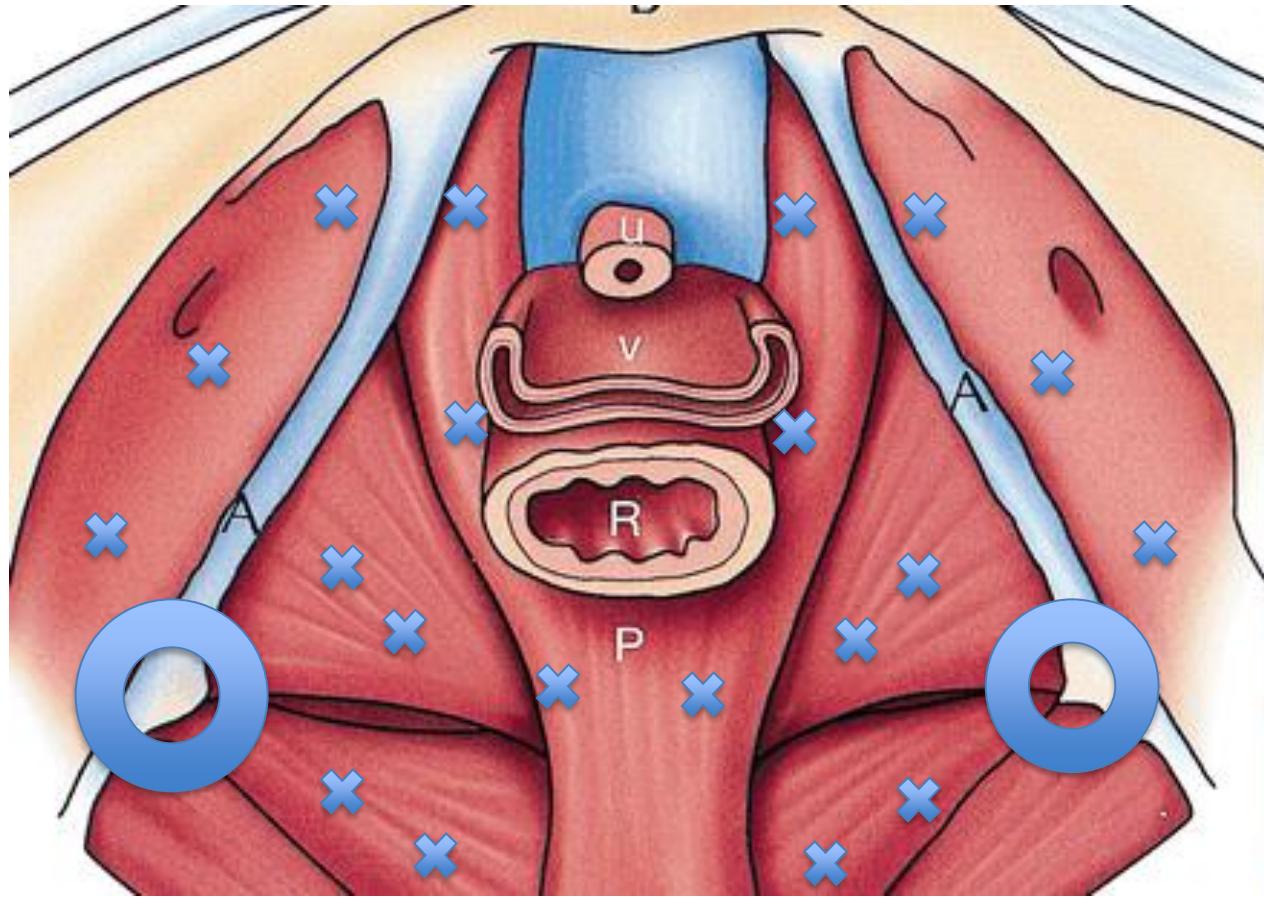
- ❖ Done under anesthesia/sedation
- ❖ Examine patient prior to sedation to identify most tender areas
- ❖ After sedation do pudendal nerve block with 0.5% Bupivacaine with epinephrine
- ❖ Dilute 200-400 units of Botox/400-800 Daaxify in 20 ml of NS
- ❖ Inject using pudendal nerve block needle at volumes 1 ml per injection deep into levator and obturator muscles (piriformis, psoas, adductor, rectus)
- ❖ Usually, patients start feeling relief from Botox about 3 weeks after the injection. If no relief and muscles feel relaxed pain is most likely due to nerve injury, not muscle spasm*

Botox/Daxxify and PT

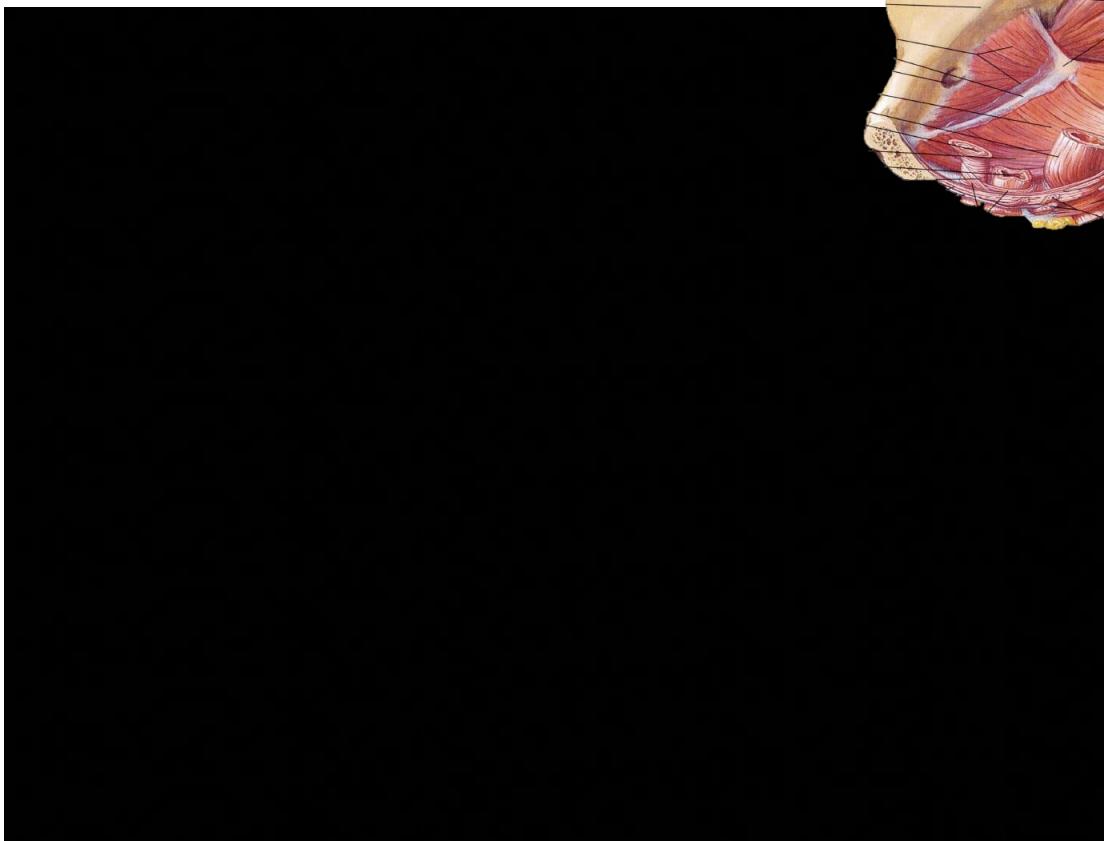
- ❖ PT should ideally be done by the same therapist who was treating the patient prior to BTX-A
- ❖ Start therapy 5-7 days after BTX-A
- ❖ Assess if there is a decrease in pelvic spasm and decrease in pain

Botulinum toxin injection

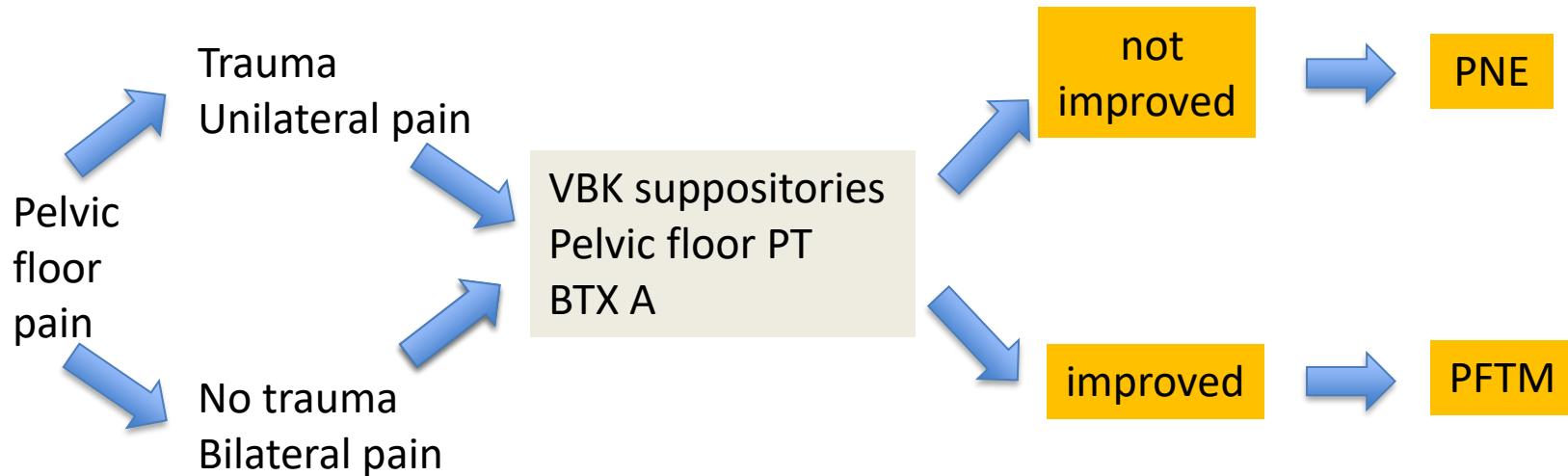




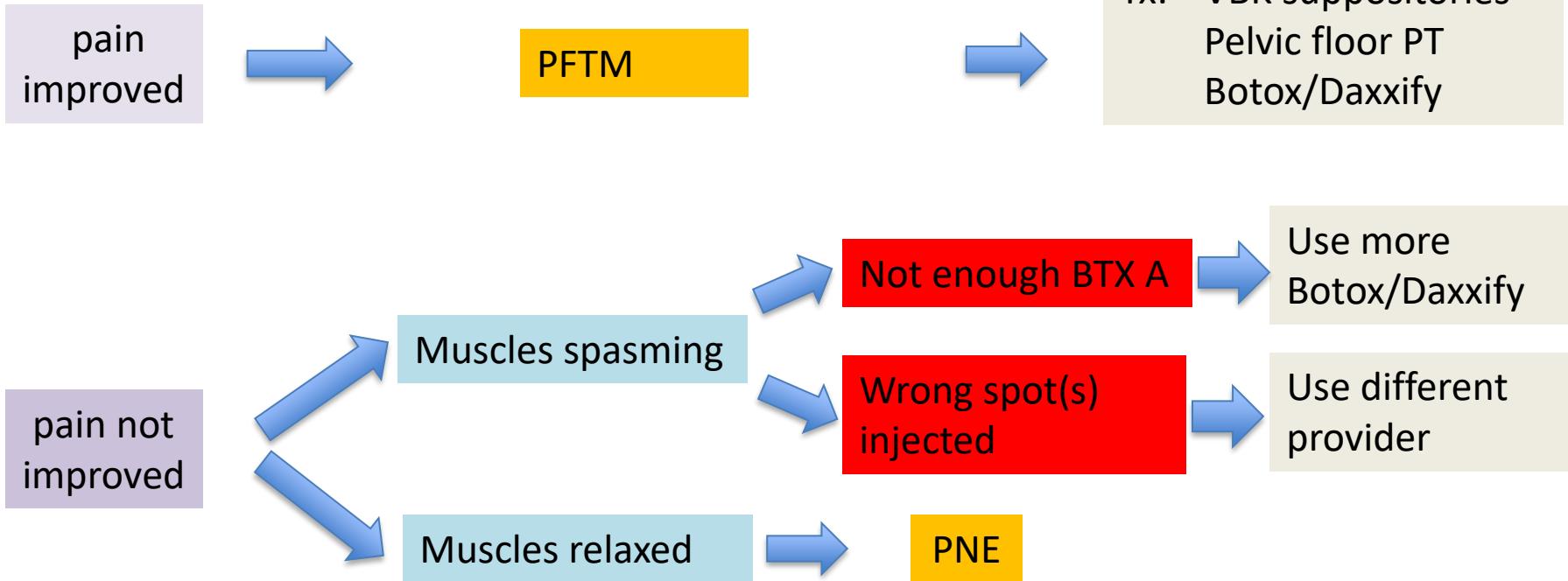
Botulinum toxin injection



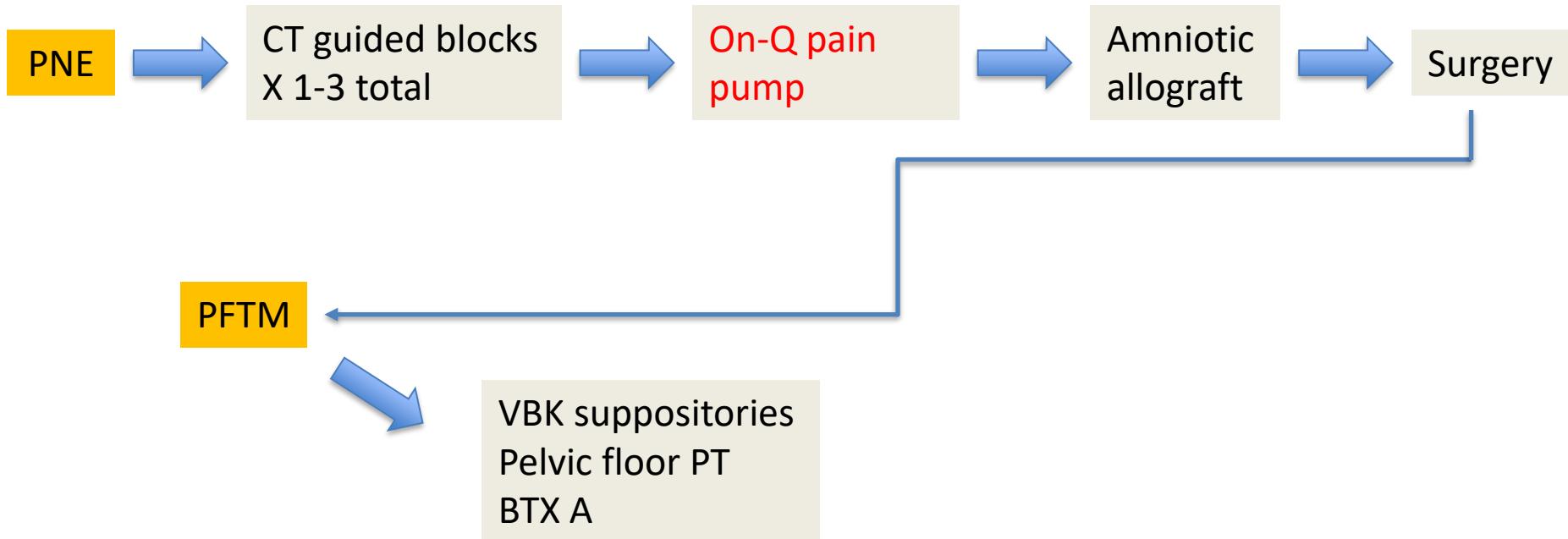
My protocol



Botulinum toxin A and PT

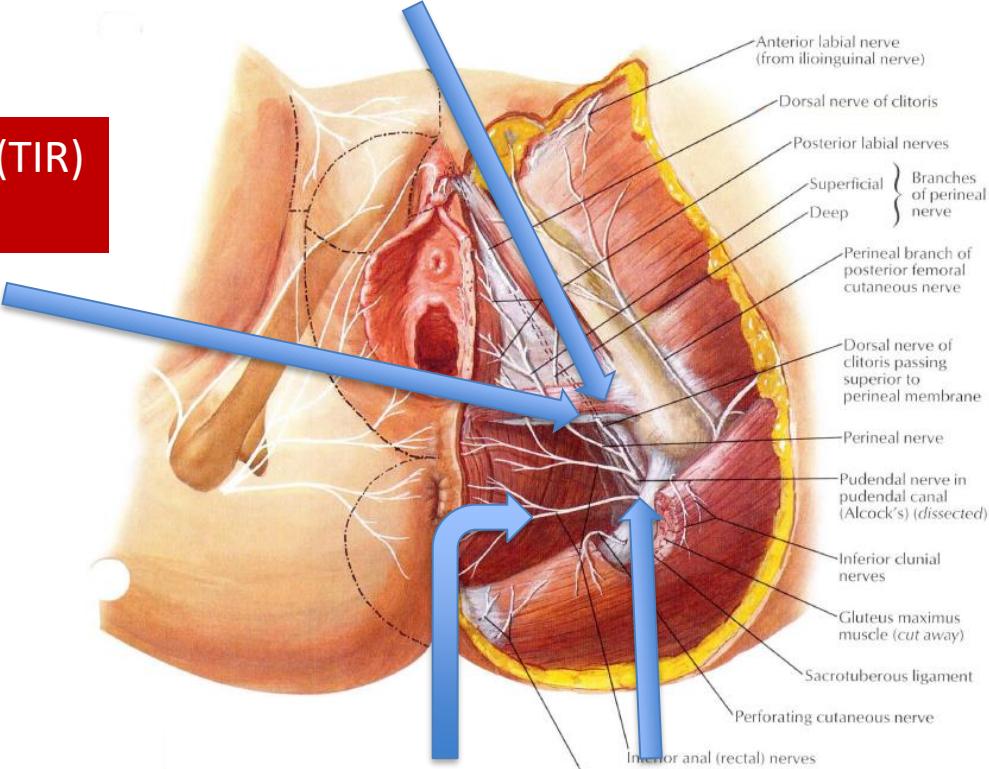


My protocol



Laparoscopic -many

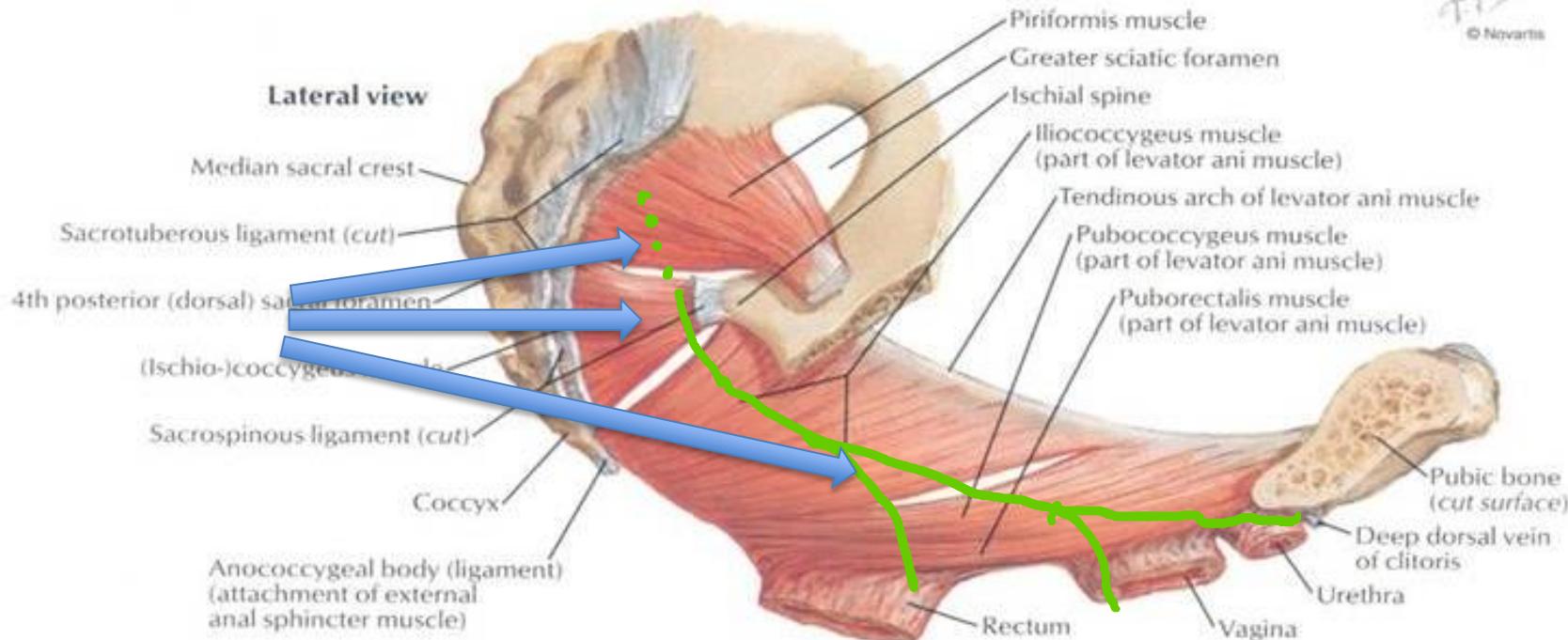
Transischiorectal (TIR)
- Eric Baurand



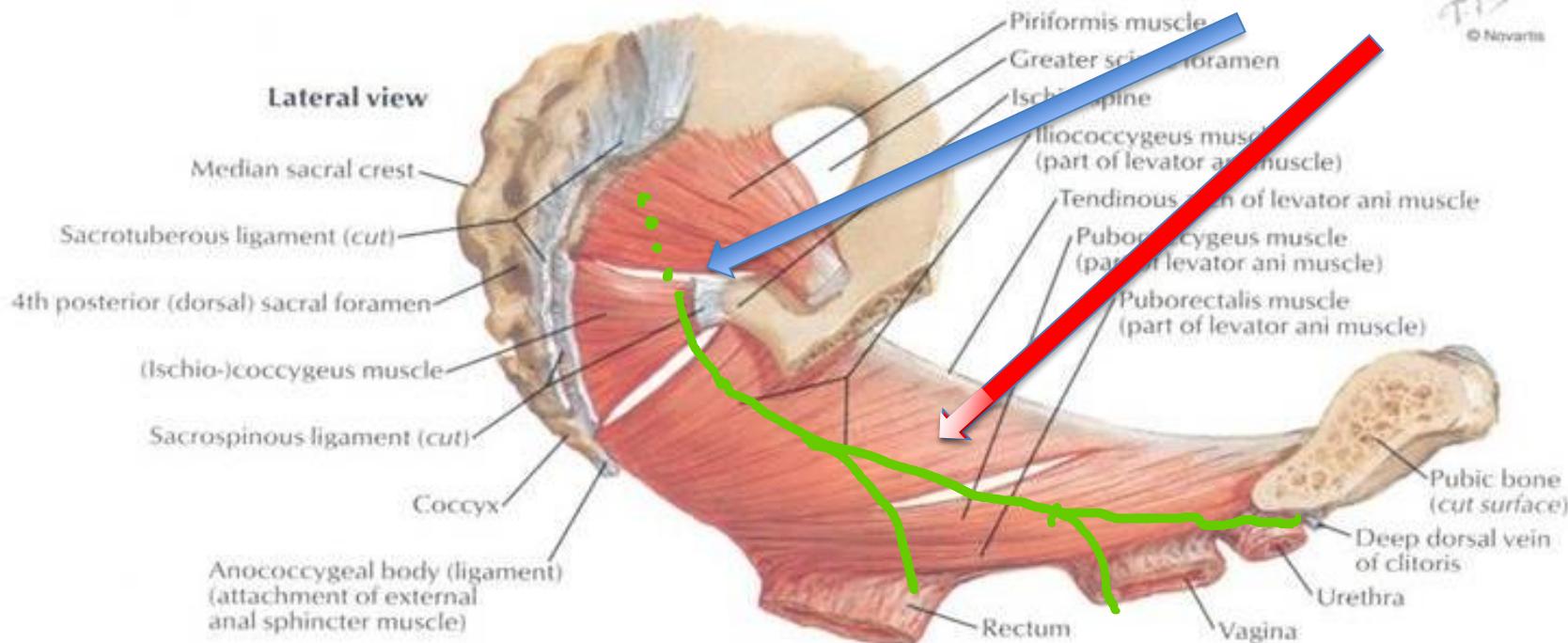
Transperineal (TP)
- Ahmed Shafik

Transgluteal (TG)
- Roger Robert

Transgluteal

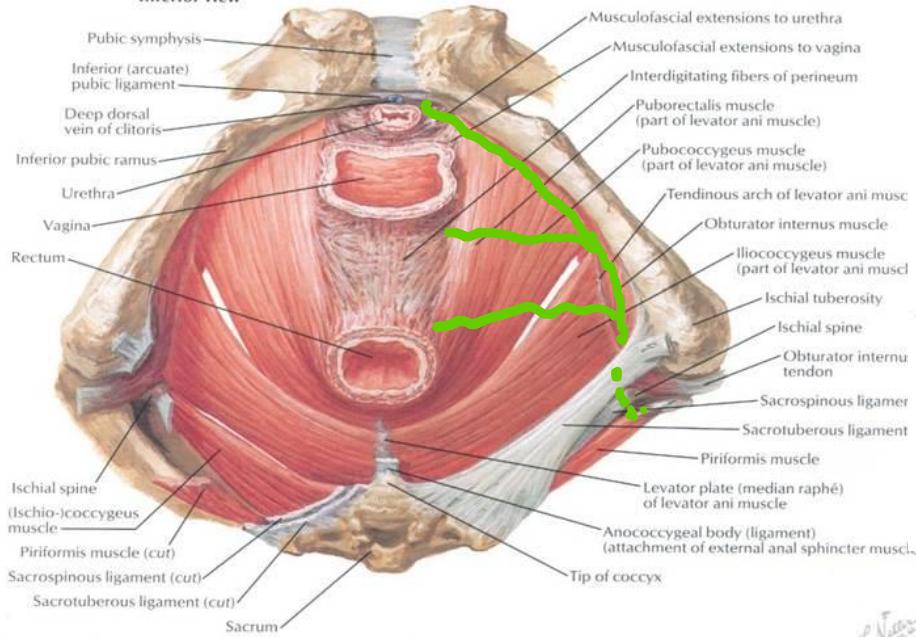


Laparoscopic

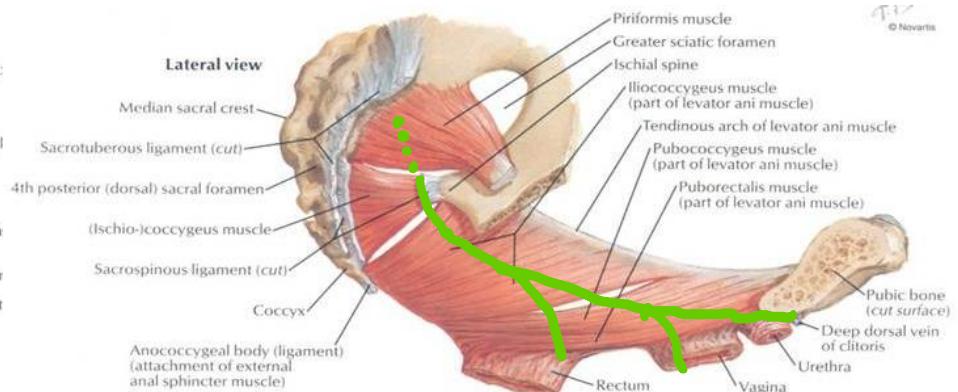


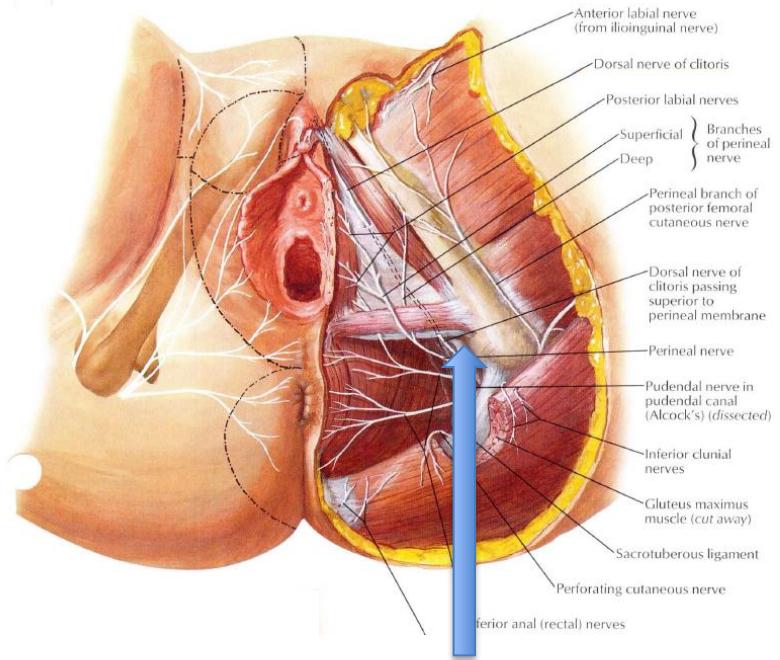
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Inferior view



Lateral view





TRANSGLUTEAL

Transgluteal pudendal neurolysis

- ❖ Developed by Prof. Roger Robert in Nantes, France – 1995
- ❖ Used his excellent knowledge of anatomy
- ❖ Modified the procedure numerous times



TG PN neurolysis



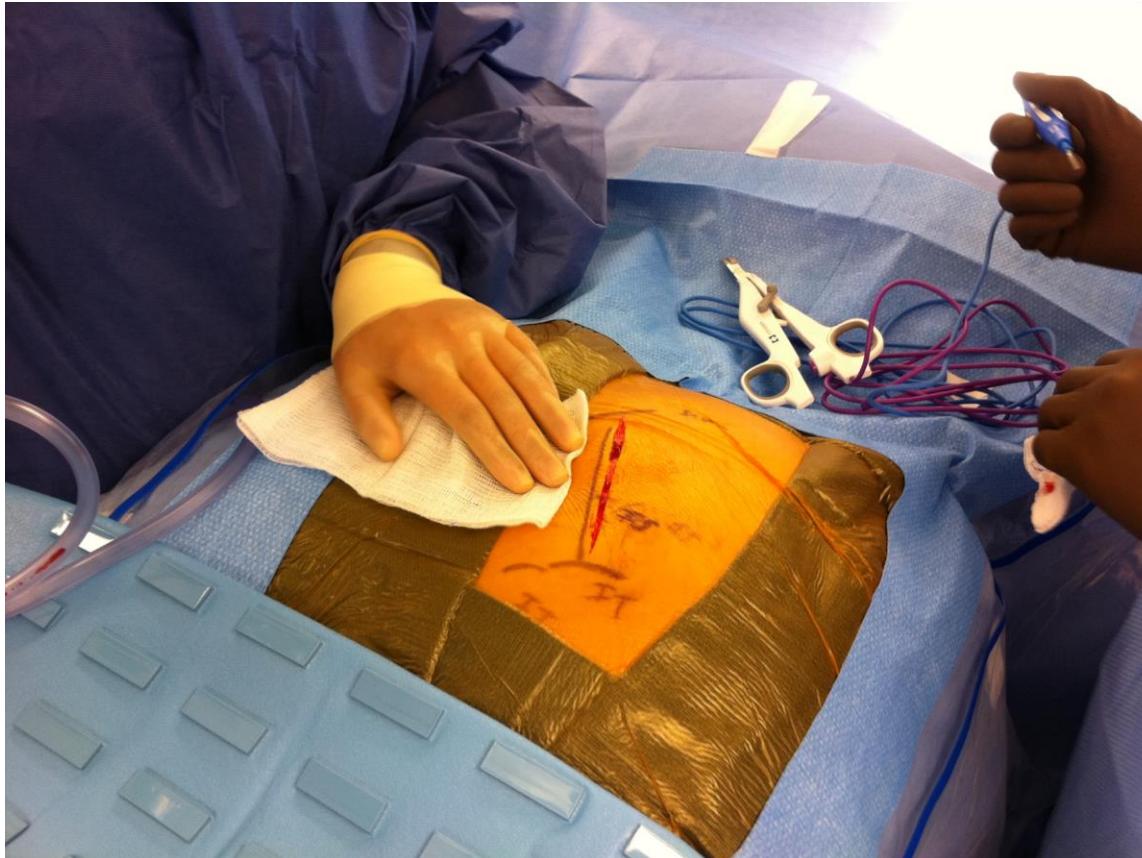
TG PN neurolysis



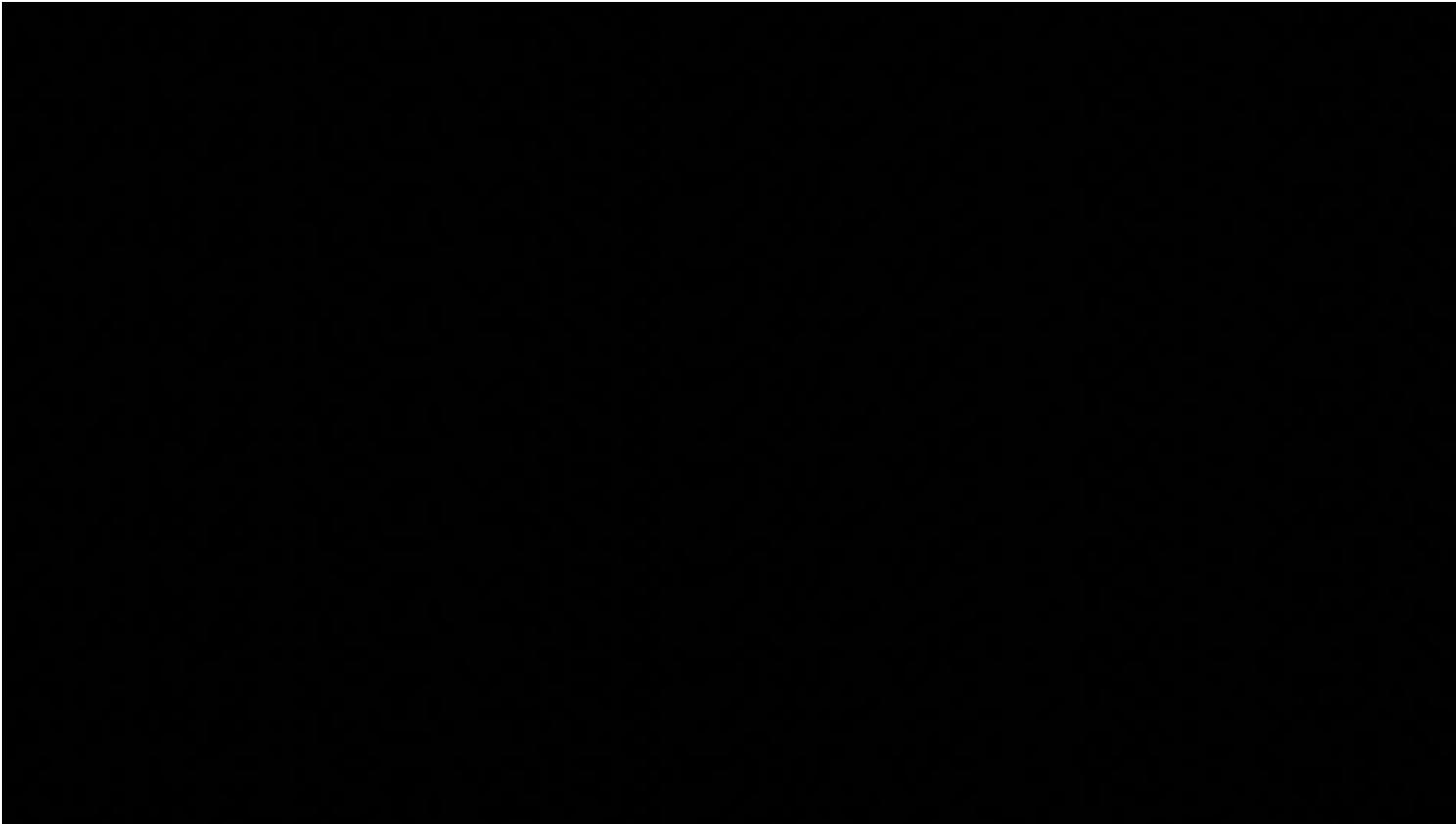
TG PN neurolysis



TG PN neurolysis



TG PN neurolysis



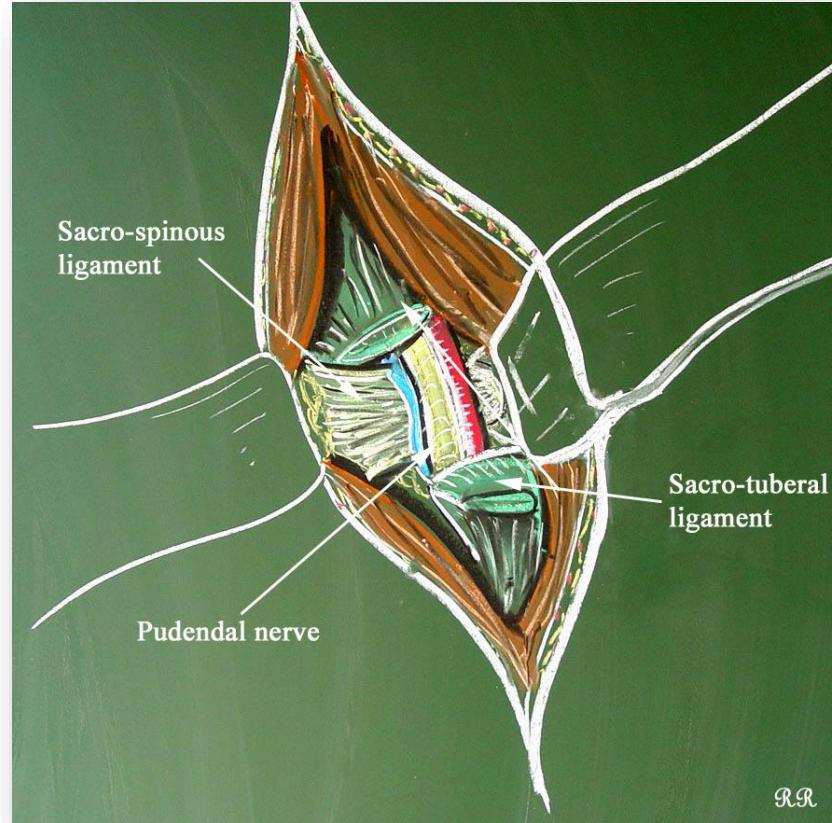
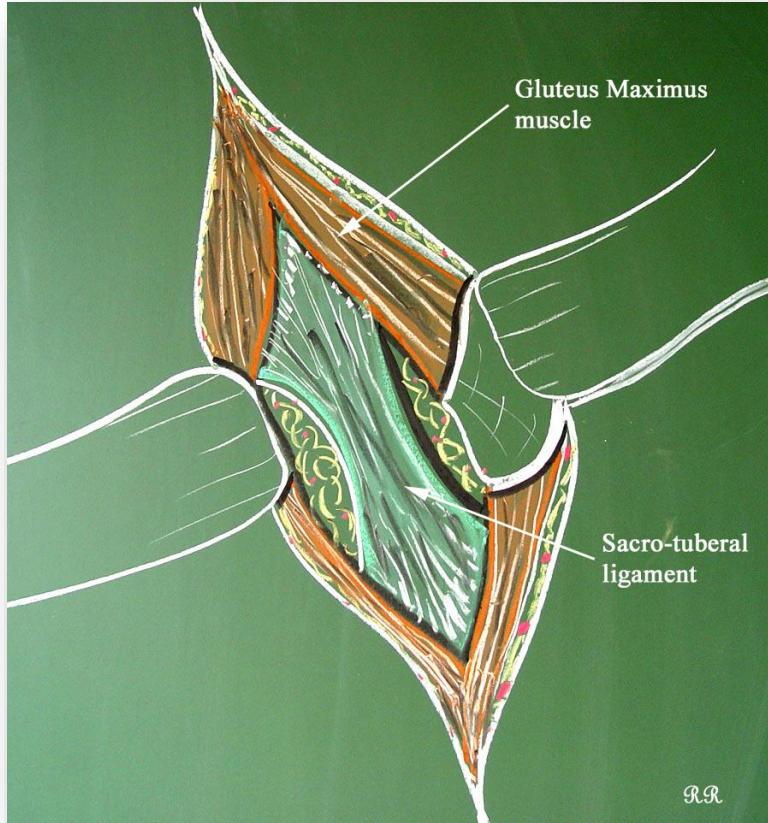
TG PN neurolysis



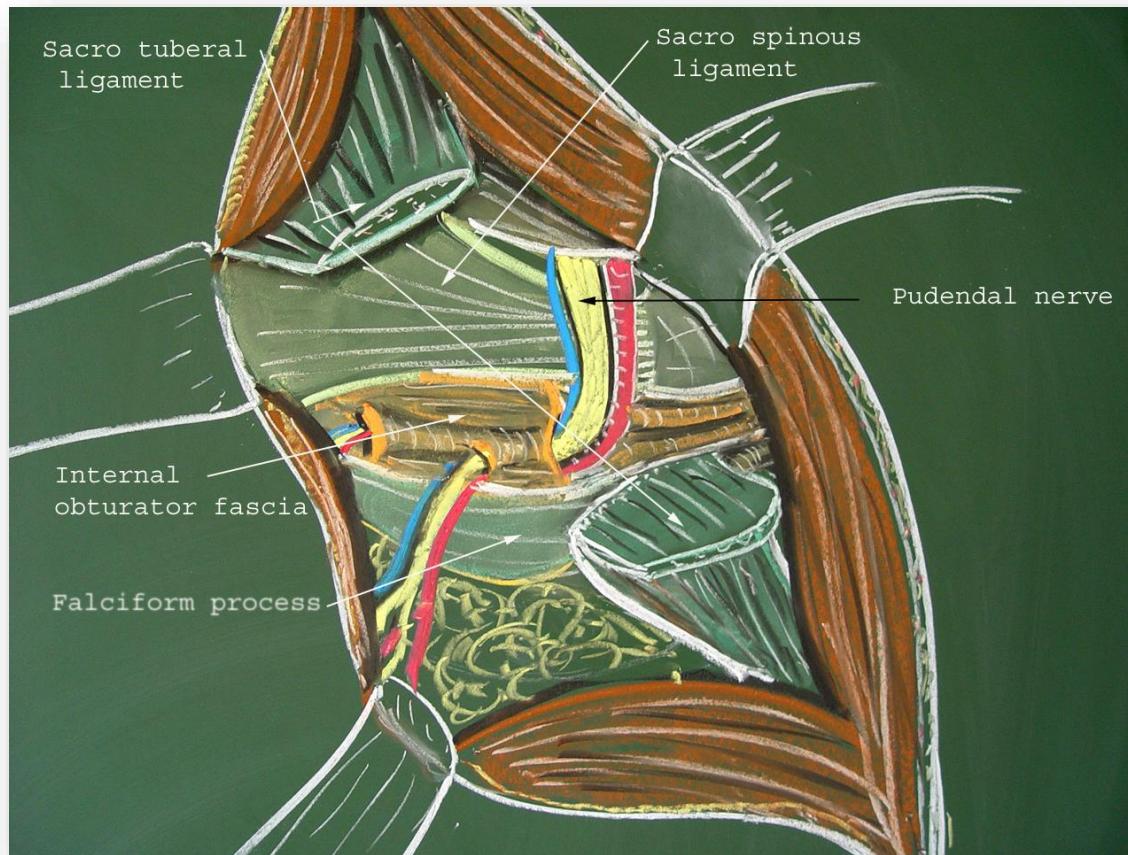
TG PN neurolysis

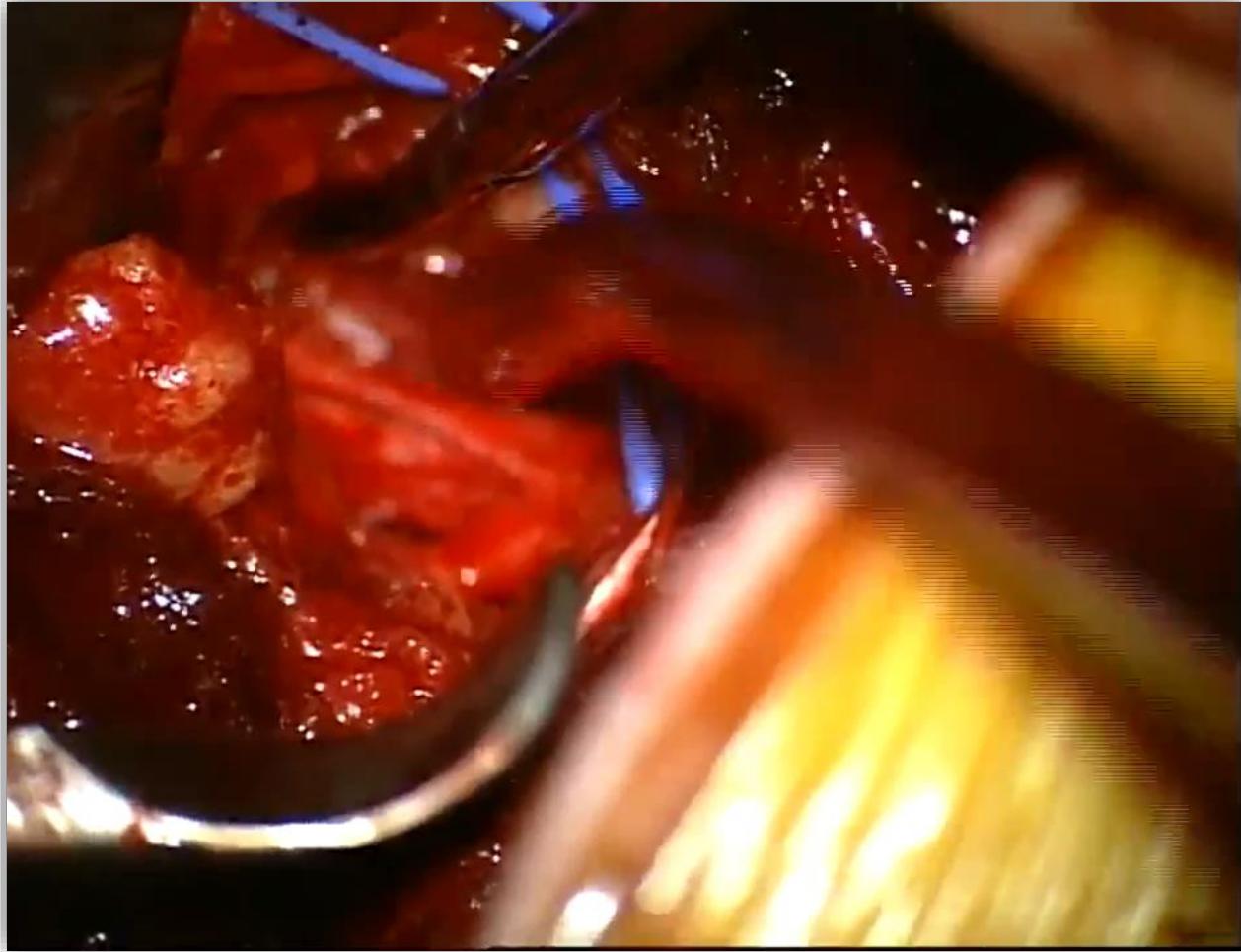


TG PN neurolysis

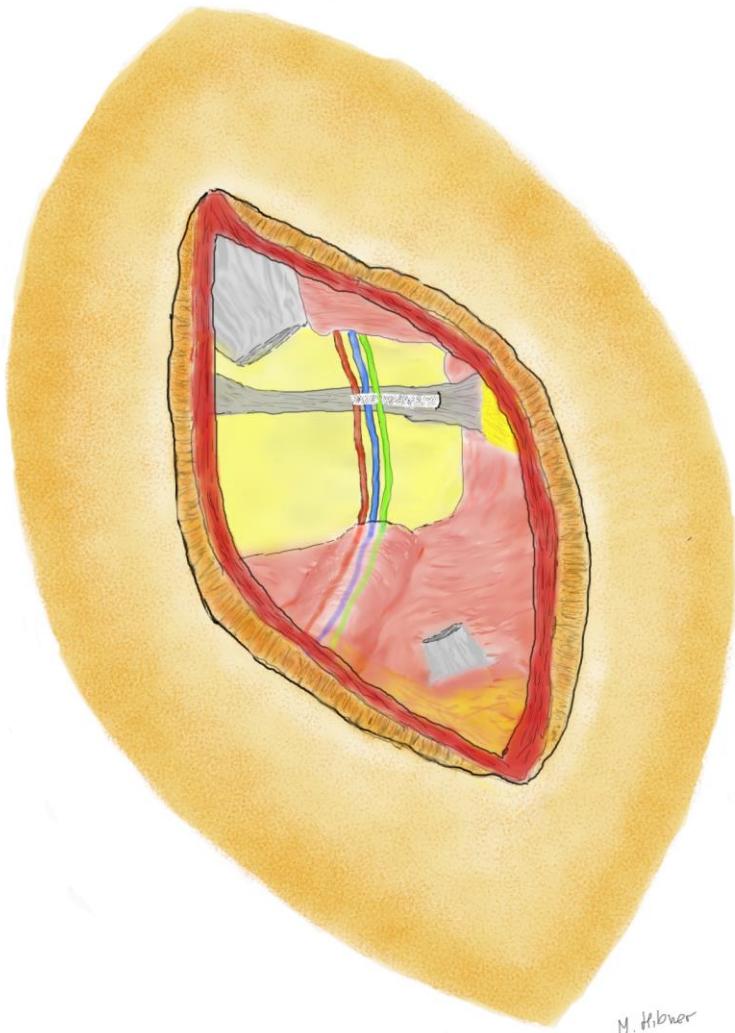


TG PN neurolysis



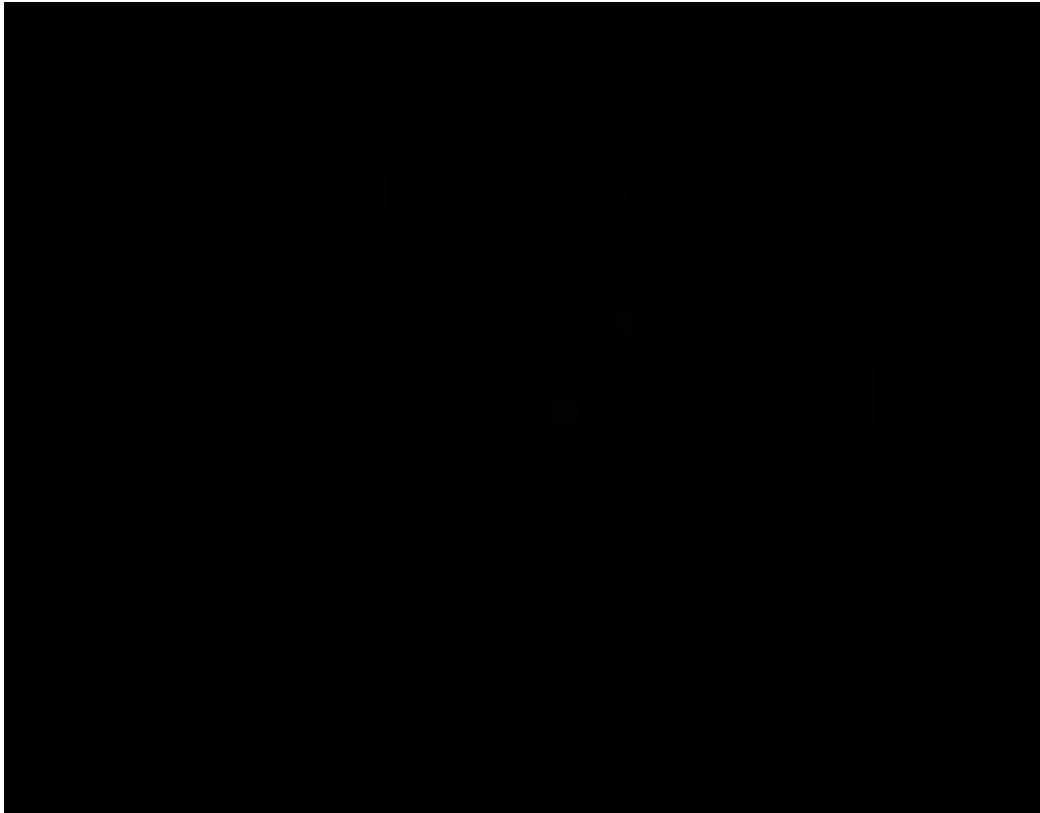






M. Hibner

Removal of mesh - pudendal nerve



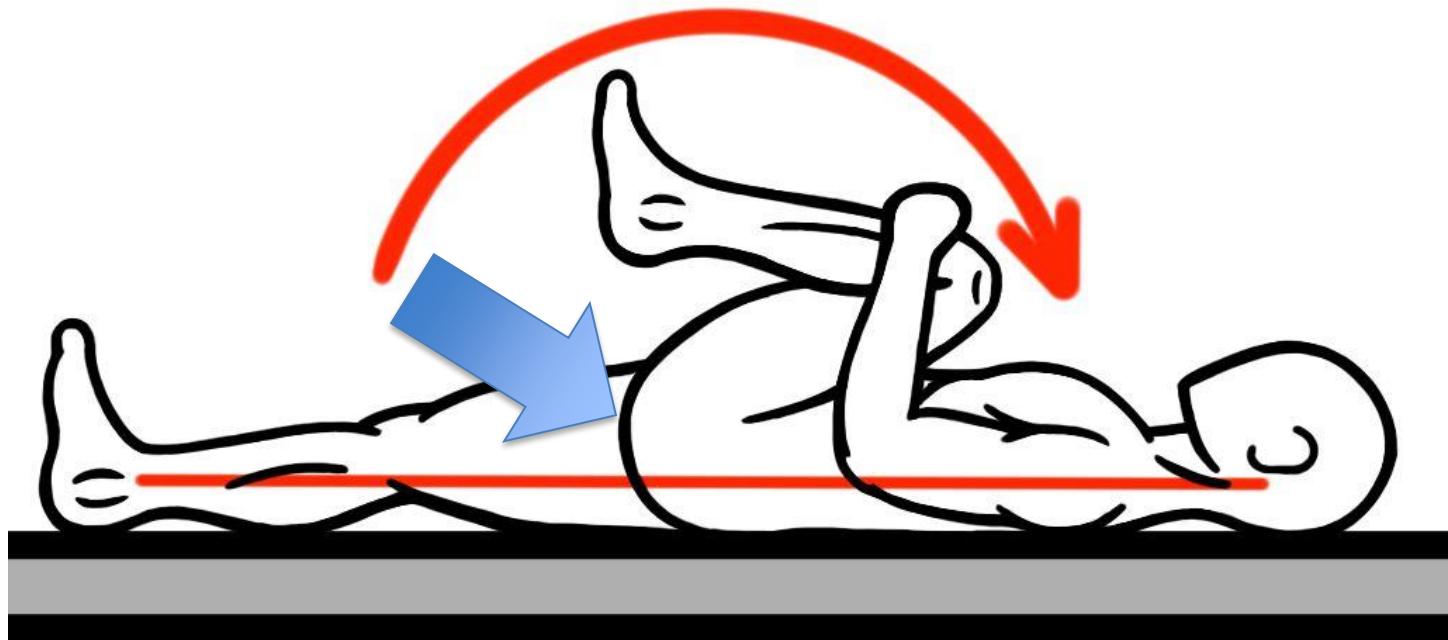
TG PN neurolysis

(Phoenix modification)

- ❖ Reattachment of sacrotuberous ligament
 - Cadaveric gracilis tendon graft
 - Without the graft – Z plasty
- ❖ Use of On-Q pain pump postoperatively (2 weeks)
- ❖ Amniofix nerve protector
- ❖ Wound vac on closed skin

Postoperative care

- ❖ Avoid activities causing pain
 - No prolonged sitting
 - No squatting
- ❖ Continue physical therapy – 6 weeks after surgery
- ❖ Continue medications
- ❖ Some patients will benefit from additional injections of Botulinum toxin A or nerve blocks or On-Q pain pump



OUTCOMES



"Do you deliver?"

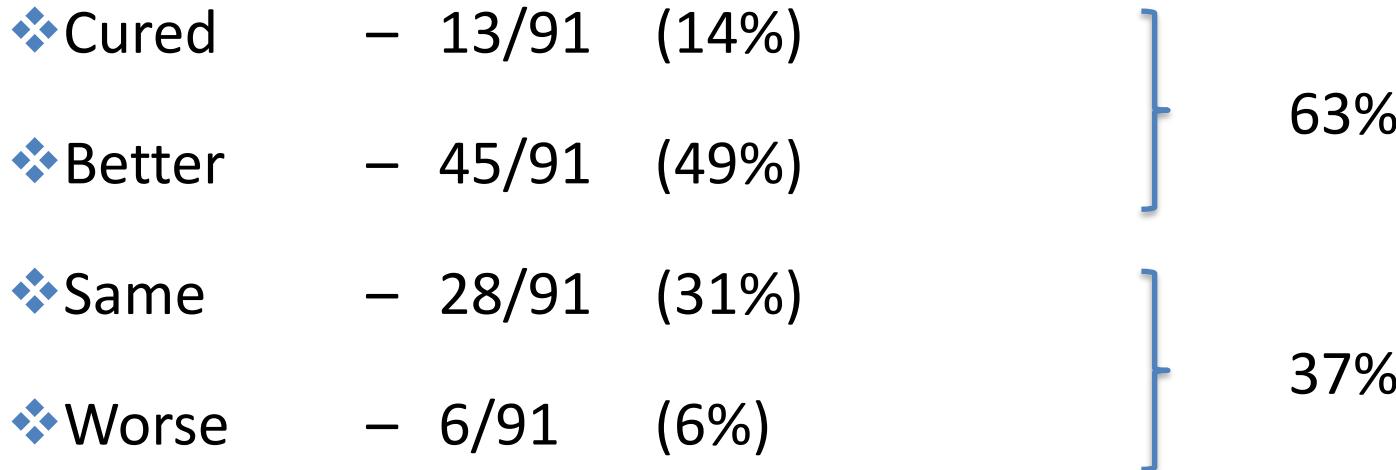
Outcomes (Nantes)

- ❖ First improvement in pain 4 months
- ❖ Maximum improvement in pain 18 months
- ❖ Results worse if neuralgia > 10 years

Outcomes 2009-2012

Do and Redo surgery combined

100 patients – 8 lost to follow up



Outcomes of repeat surgery

- ❖ 10 patients, 1 lost to f/u
- ❖ Mean follow-up 23 months
- ❖ 8/9 global improvement
- ❖ 2 patients pain free
- ❖ VAS decrease from 7.2 to 4.0 ($p=0.02$)
- ❖ Improvement in sitting time in 8 patients from 5 minutes to 45 minutes ($p=0.08$)
- ❖ No worsening of symptoms
- ❖ Correlation between global improvement and comfortable sitting time $R=0.86$



Original Article

Repeat Operation for Treatment of Persistent Pudendal Nerve Entrapment After Pudendal Neurolysis

Michael Hibner, MD, PhD, Mario E. Castellanos, MD*, David Drachman, PhD, and James Balducci, MD, MBA

From the Department of Obstetrics and Gynecology (Drs. Hibner, Castellanos, and Balducci), St. Joseph's Hospital and Medical Center, Creighton University School of Medicine, Phoenix Campus, Phoenix, Arizona, and Maricopa Integrated Health System (Dr. Drachman), Phoenix, Arizona.

THE JOURNAL OF
MINIMALLY INVASIVE
GYNECOLOGY

Outcomes 2009-2012

Do and Redo surgery combined

❖ Patients who got better

- Had isolated posterior (rectal and/or perineal) pain
- Have pain medial to ischial tuberosity
- Had nerve wrap

❖ Patients who did not get better

- Had generalized pudendal pain
- Had anterior (clitoral) pain
- Had symptoms of CRPS

Outcomes/levels of evidence

- ❖ Roger Robert 2005 randomized trial (level I)
- ❖ 32 patients randomized to surgery vs. medical treatment
- ❖ 3 months 50% improved in surgery group vs. 6.2%
- ❖ 12 months 71.4% vs. 13.3%

**On average 2/3 of
patients benefit from
pudendal neurolysis**



IF SURGERY FAILS

**Pain improvement
may take up to 24
months after surgery**

Why does surgery fail?

- ❖ Wrong diagnosis
- ❖ Incomplete decompression
- ❖ Nerve too damaged to recover
- ❖ Different pain after surgery
 - Muscle spasm
 - Central pain
- ❖ Re-scarring of the nerve

If surgery fails

- ❖ Muscle spasm/pain
 - Continued physical therapy + Botulinum toxin A injections
- ❖ Central pain
 - Ketamine infusion
 - Nerve blocks
 - CT placed On-Q pain pump
- ❖ Continued/recurrent nerve compression
 - Repeat surgery



THE END