

Pudendal Neuralgia: A Comprehensive Approach

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Pudendal Neuralgia: Clinical Diagnosis and Management

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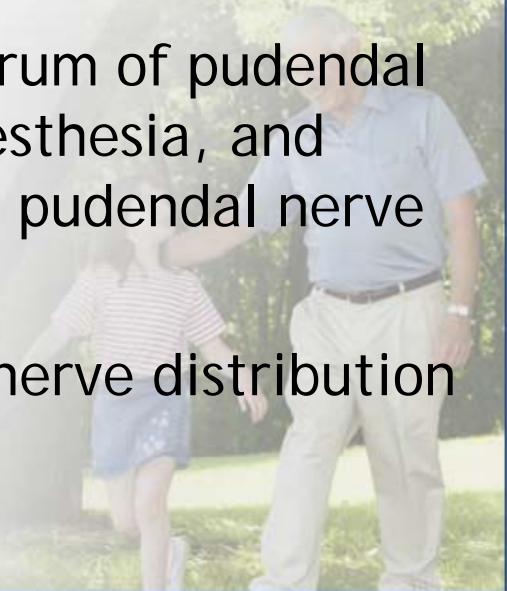
Disclosures

- **Research funding**
CIHR, CFI, Pfizer, Purdue, Lilly,
Boehringer, Merck,
AstraZeneca
- **Consultant, advisor, speaker**
AstraZeneca, Purdue, Lilly,
Boehringer, Janssen, Paladin, BioVail
Merck, Wyeth, Pfizer



Definition (Antolak 2006)

- Perineal and other pelvic pain that is aggravated by sitting and reduced or relieved by sitting on a toilet seat
- The pudendal territory is extensive and may include suprapubic, inguinal, genital and perineal pain, vulvodynia, coccydynia, and proctalgia
- Bladder, bowel and sexual dysfunction are common
- Pudendal neuropathy encompasses a spectrum of pudendal dysfunction including hyperesthesia, hypoesthesia, and urinary and fecal incontinence. Increase in pudendal nerve terminal latency sometimes helpful
- Pudendal neuralgia involves pain in the nerve distribution



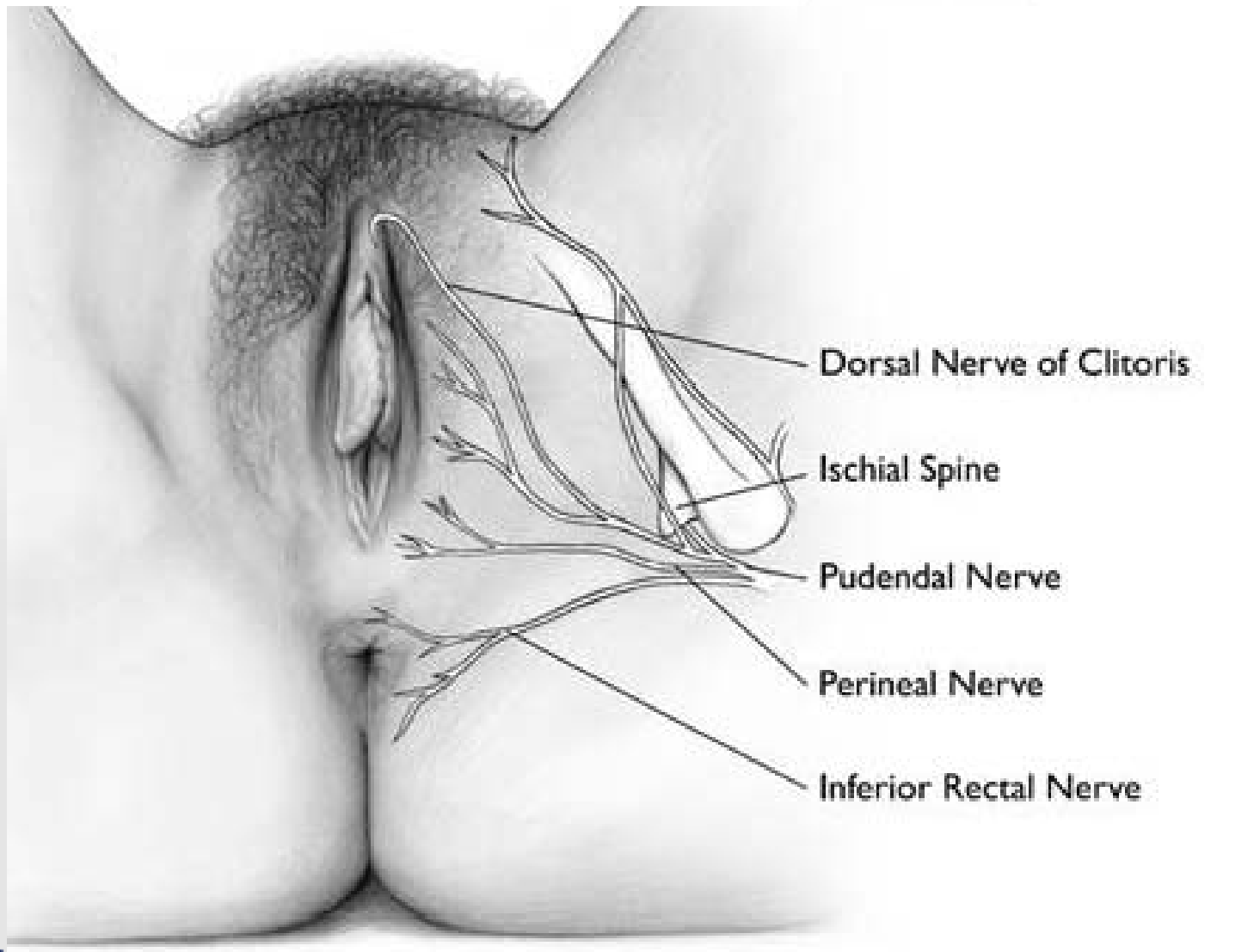
- No published data on prevalence
- Female : male is 2.5 :1
- 25-80 but mean age in 6th decade
- An important consideration in the differential of genital and perineal pain syndromes in men and women

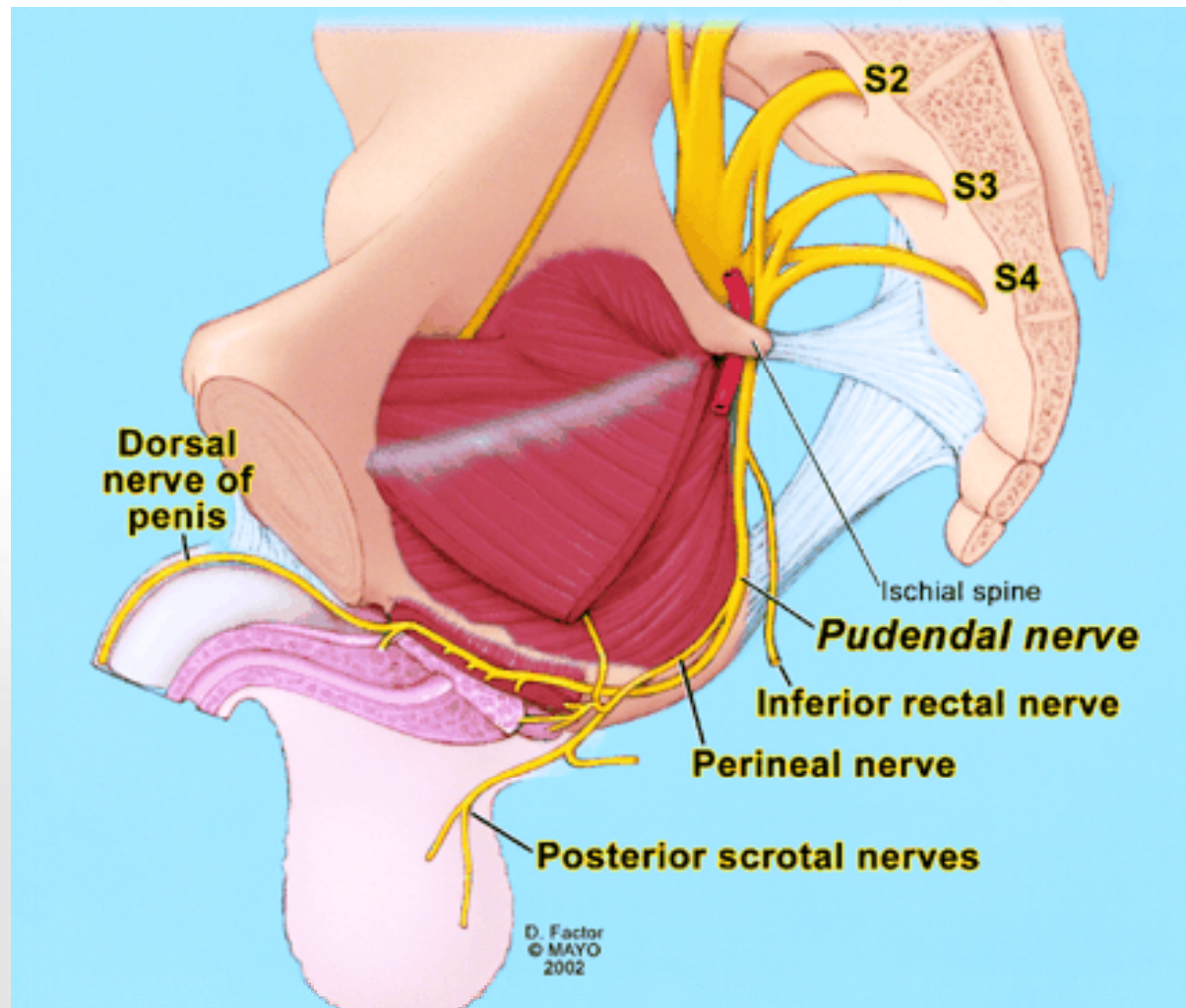


Team needed: Multidisciplinary and Unique in Canada

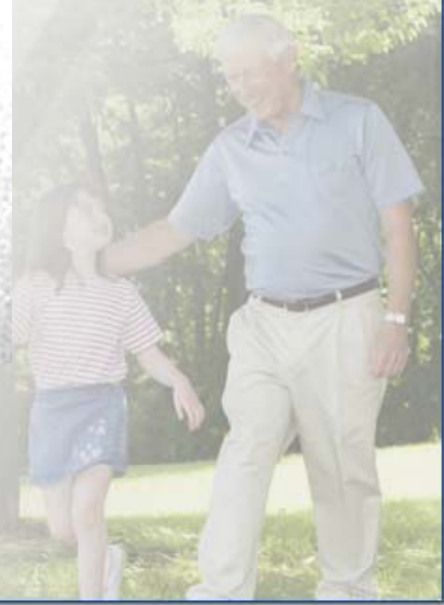
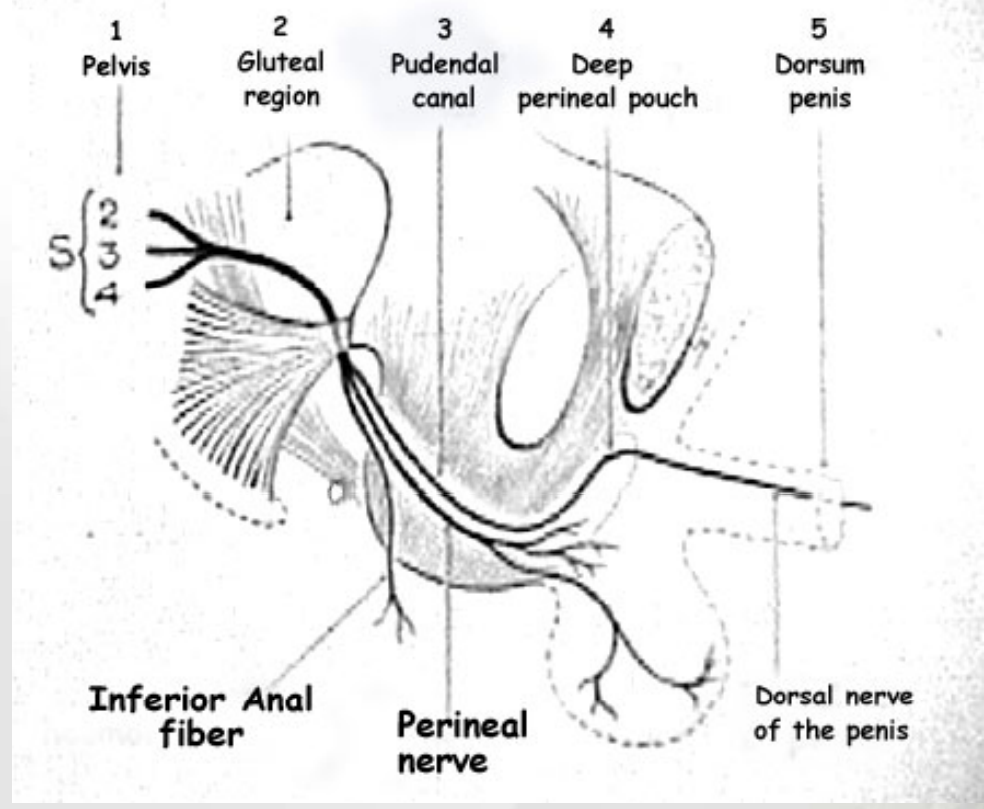
- Neurology
- Nursing
- Anaesthesiology
- Gynecology
- Urology
- Psychiatry
- Behavioural therapies
- Sex therapy
- Unfortunately no surgeons in all of Canada do the surgery







Schematic anatomy of pudendal nerve. (Courtesy of the Mayo Foundation) Drawing illustrates pudendal nerve arising from sacral nerve roots S2–S4, exiting pelvis to enter gluteal region through lower part of greater sciatic foramen and reentering pelvis through lesser sciatic foramen. Pudendal nerve gives rise to inferior rectal nerve, perineal nerve, and dorsal nerve of penis or clitoris.



Description

- Pain in the territory innervated by the pudendal nerve
- Anterior and posterior urogenital areas (vulva, clitoris, and perianal area in women) and (penis, scrotum and perineal area in men)
- Unilateral or bilateral
- Pain exacerbated with sitting
- Pain alleviated (or diminished) by standing, lying on the non-painful side, or sitting on a toilet seat
- Central sensitization may affect impact on posture
- Often standing in the waiting room



- Central sensitization sometimes is associated with pain outside the normal nerve distribution and persisting causing pain in feet, toes, buttocks
- Typically gradual onset, severe burning and aching
- Foreign body sensation in the rectum, urethra or vagina (e.g. golf ball, or fist, red-hot bowling ball)
- Pain when digit applied against ischial spine during rectal or vaginal exam
- Often allodynia and hyperesthesia or hypoesthesia



Pathophysiology

- Slow and gradual compression but sometimes acute
- Bicycle riding. Pressure applied by cyclists to perineum are above the pressure known to cause ischemic pressure



Diagnosis

- Clinical features of chronic debilitating perineal pain exacerbated in the seated position and relieved by standing
- Clitoral or penile pain
- Unexplained rectal pain
- Unilateral or bilateral vulvar pain
- Scrotal pain
- Dyspareunia



Clinical differentials

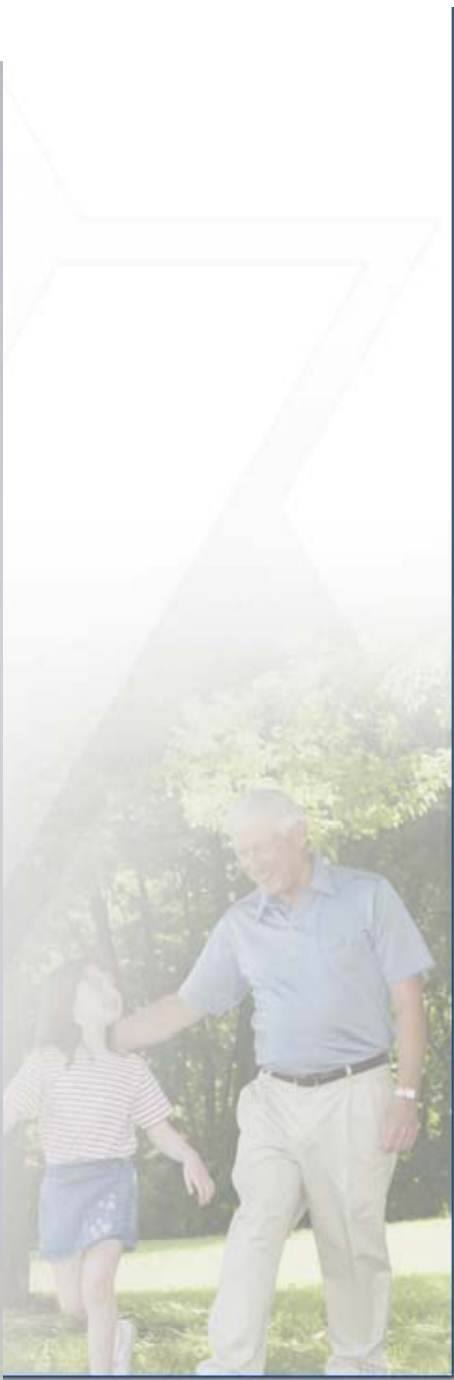
- Vulvodynia
- Clitoridynia
- Endometriosis
- Interstitial cystitis

- Prostatitis
- Prostadynia
- Testicular syndrome

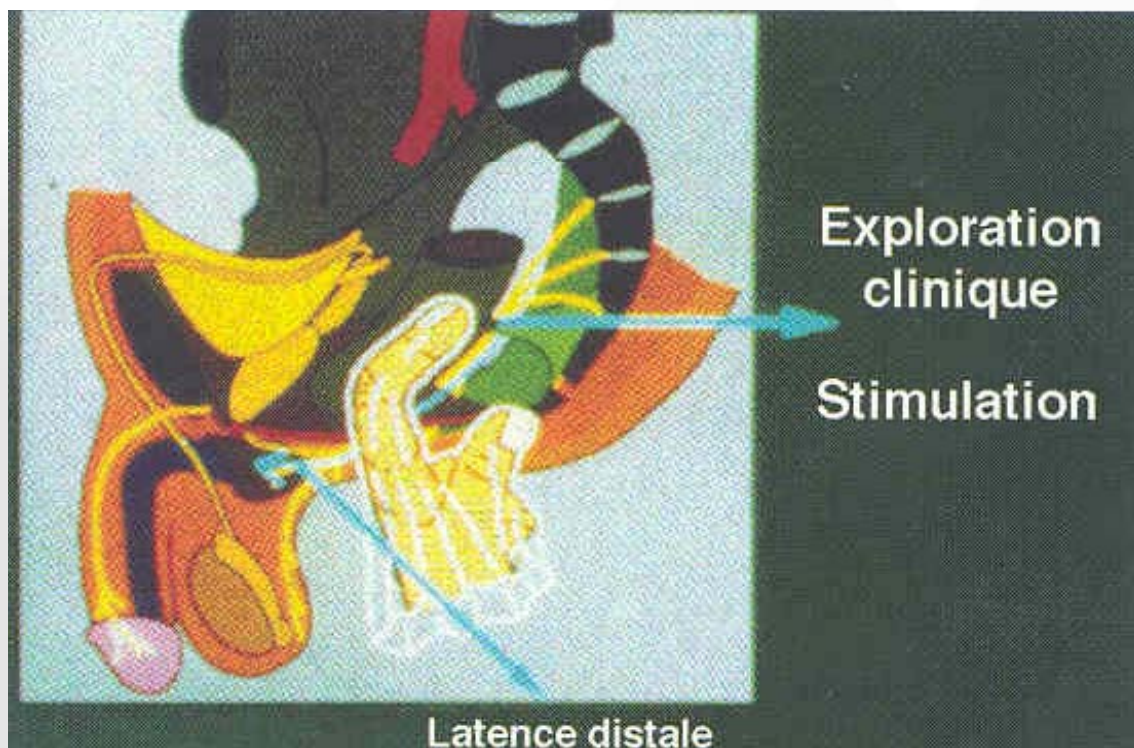


Neurophysiologic testing





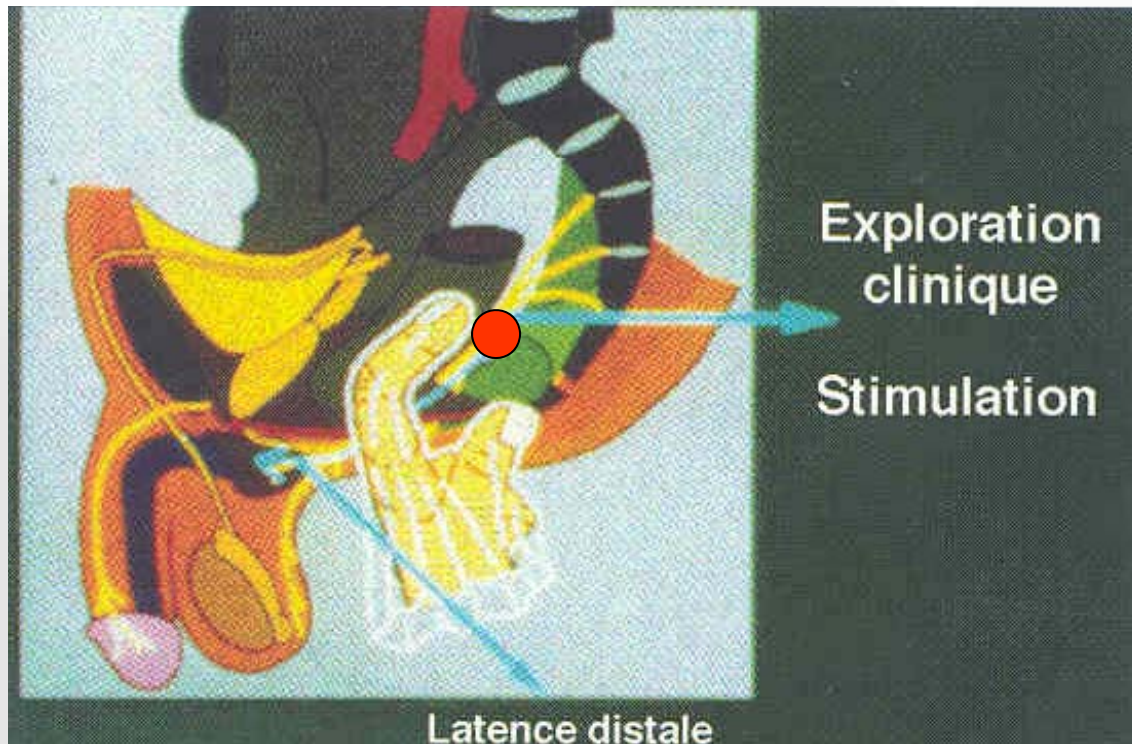
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Pudendal Nerve Terminal Motor Latency Test (PNTMLT)

Dr. Jean Jacques Labat, Hotel Dieux, Nantes, FR

Stimulation reproduces subjective pain in 45%.



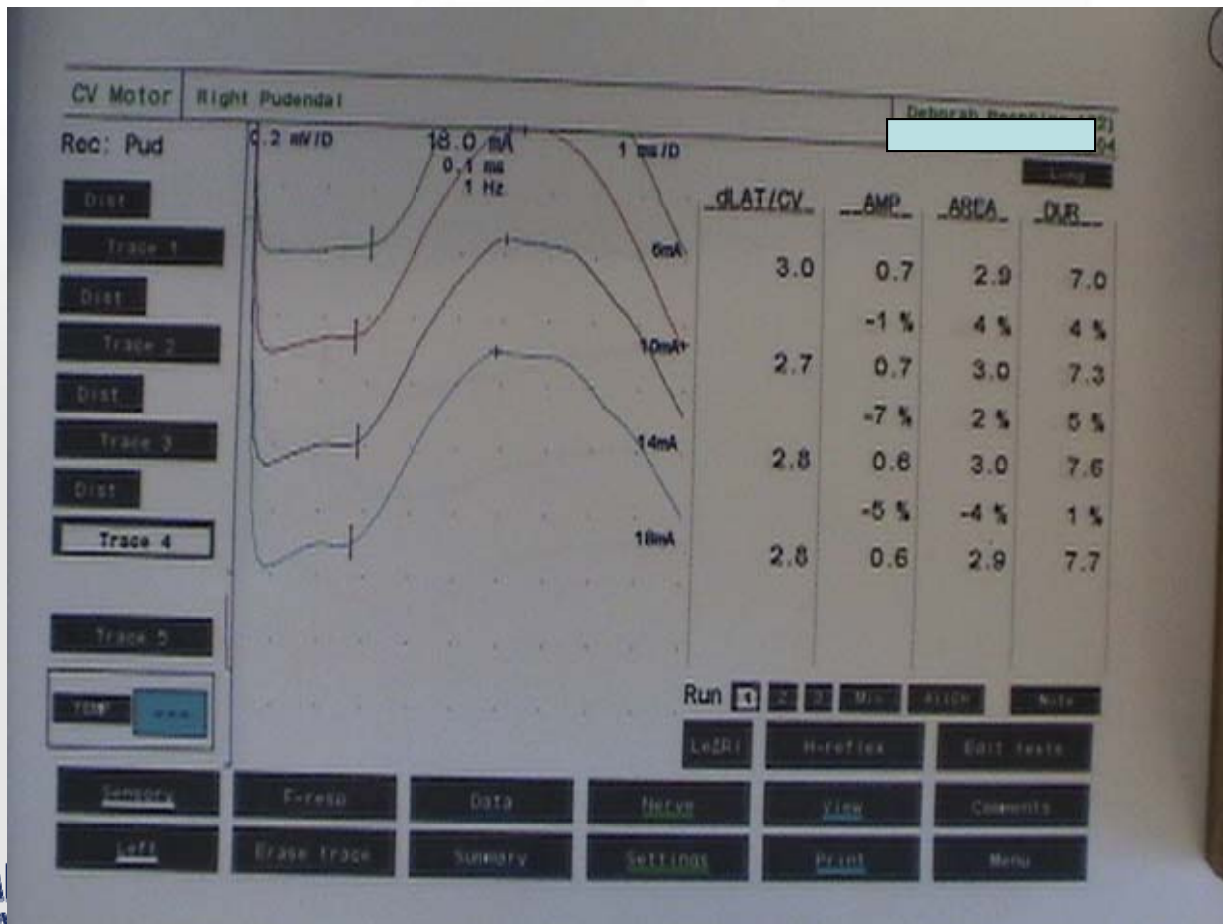
St. Mark's electrode
(Alpine Biomed)



Dr. Jean-Jaques Labat, Hotel Dieux, Nantes, France

Pudendal nerve terminal motor latency test (PNTMLT)

Average in this patient = 2.8ms (elevated). [Normal < 2.2ms]
Test stimuli caused paresthesias in clitoris.*



Pudendal nerve terminal latency

- Done in a number of Centres including our own
- Debate on specificity and sensitivity
- Often not relied upon
- Latency greater than 2.2 msec
- But only measures one branch of the pudendal nerve



QST

- Warm detection threshold said to be a sensitive test



Pudendal nerve block (Dr. Peng)

- Done in our centre
- Can be done by transvaginal route blindly
- Can be done via transperineal
- Transgluteal can be assisted by imaging and permits blockade at the ischial spine or in Alcock's canal. Supine with image intensifier, ultrasound, or CT



Imaging

- Routine MRI or CT not very helpful
- Often pick up Tarlow cysts
- MR Neurography



MR Neurography

- Dr. Aaron G. Filler, MD PhD
-
- Dr. Aaron Filler is the world's leading expert in treatment of nerve pain. He has revolutionized nerve-pain treatment by inventing several new technologies. One such technology, MR Neurography, enables doctors to use an MRI scanner to examine nerves, previously a difficult-to-impossible tissue to visualize with MR imaging. (From his own website)



ADDOPT: The Six Pillars of Pain Management

- **A**ssess risk assessment symptom assessment
- **D**efine the problem and treat
- **D**iagnose the kind of pain and treat it NeP Nociceptive
- **O**ther issues mood, anxiety, sleep, addiction, sexual
- **P**ersonal management self management
- **T**reatment evaluation



Management of Pudendal Nerve Pain

- First you have to think of it when you see a patient with urogenital and perineal pain
- Also have to try to diagnose it



Modification of activities

- Wide donut cushion or sitting pad
- Stop bicycle riding

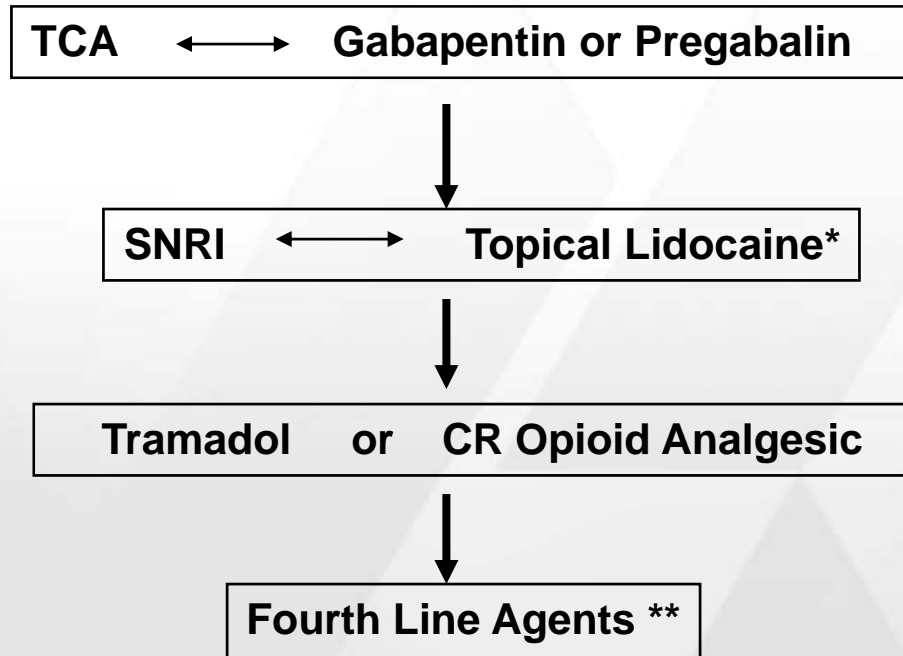


Treatment of neuropathic pain

- There is no specific algorithm for pharmacotherapy



STEPWISE PHARMACOLOGIC MANAGEMENT OF NEUROPATHIC PAIN (Peripheral)



Add additional agents sequentially if partial but inadequate pain relief***

* 5% gel or cream – useful for focal neuropathy such as postherpetic neuralgia..

** eg Cannabinoids, methadone, lamotrigine, topiramate, valproic acid

*** Do not add SNRI to TCA



Physical therapy

- Probably of some value
- Internal soft tissue release and mobilization



Pudendal nerve block (Dr. Peng)



Pudendal nerve surgery (Dr. Antolak)

- Not done in Toronto or Canada



Conclusion

- An unrecognized syndrome unless you happen to have it
- Diagnostic difficulties
- Much on the internet
- Need a high index of suspicion
- Need a multi disciplinary approach and patience



