Diagnostic criteria and assessment of pudendal neuralgia

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Convergences PP Nantes 17/12/2009
Pudendal neuralgia

- Pathologies of the pudendal nerve: all are not painful
  - Mononeuropathy
    - By compression
      - Entrapment: ligament, fibrosis
      - Neoplastic compression
    - Post herpetic neuropathy
    - For nerve tumor
      - Schwanome, neurofibroma
    - Post traumatic
      - Pelvis, perineum
      - Surgical
    - Post radiotherapy
  - Stretch neuropathy
    - Post delivery
    - When chronic constipation
Pudendal nerve: conflicts sites

- Infra piriformis channel: possible conflict also with the sciatic trunk
- The ischial spine: conflict in the ligaments between clamp ligament sacrospinous and sacrotuberous
- The pudendal canal of Alcock fibrosis of the fascia of the obturator internal conflict with the process falciform ligament sacrotuberous
- One factor aggravating the hypertension perineal nerve of the penis or clitoris

Pathophysiology of pain: loss of mobility of the pudendal nerve
Diagnostic criteria:

objectives

- A common language
- Definition of a homogeneous population of patients needed for epidemiological studies, clinical research
- Simple but consensual, easily memorized for every practitioner
- To avoid misdiagnosis coarse
- But inevitably controversial, complex disease, diagnosis constantly discussed again.
Méthodologie

- Multidisciplinary working party in Nantes September 2006,

- Francophone perineal electrophysiology club in Paris December 2006.
  - Nantes, Paris (Rotschild), Bayonne, Rouen, Clermont-Ferrand, Lyon, Bruxelles, Toulouse, Lille, Rennes, Strasbourg, Besançon

- 2 publications
  
  - French: Pelvipérinéologie 2007

  - International: Neuro urology and urodynamics (ICS) 2008
Essential criteria for the diagnosis of pudendal neuralgie by pudendal nerve entrapment (PNE)

- Pain in the territory of the pudendal nerve (from the anus to the penis or clitoris)

- Pain is predominantly experienced while sitting (relief of pain when sitting on a toilet)

- The pain does not wake the patient at night

- Pain with no objective sensory impairment

- Pain relieved by diagnostic pudendal nerve block *
*diagnostic pudendal nerve block*

- Whatever the method of identification (rx, CT Scan, ultrasound, neurostimulation)
- In the sacrospinous ligament or in the pudendal canal
- A positive block (relief of more than 50% of pain for the duration of local anesthesia) asserts a breach below the injection site but not its nature
8 critères complémentaires au diagnostic de névralgie pudendale

- Burns, shooting, numbness, stabbing pain
- Allodynia ou hyperpathia
- Vaginal or rectal foreign body sensation (« sympathalgia »)
- Worsening of pain during the day
- Predominantly unilateral pain on palpation of the ischial spine
- Pain triggered by defecation
- Presence of exquisite tenderness (unilatéral is suggestive)
- Clinical neurophysiology findings in men or in nulliparous women*
Pain at ischial spine
Limits of neurophysiological tests

• Low specificity in multiparous women given the frequency of perineal stretch neuropathy (childbirth)

• Many cuts asymptomatic (corpse)

• Does not explore all types of fibers, normality does not exclude the possibility of PNE

• Does not explore the functional abnormalities, such as local excitability generating action potentials aberrant or ectopic
4 exclusion criteria

- Exclusively coccygeal, gluteal, pubic or hypogastric pain
- Pruritus
- exclusively paroxysmal pain
- Imaging abnormalities able to account for the pain
Lombo sacral and pelvic RMI

- Scan RMI: more questions than responses
- Problem with arachnoïd cyst: always asymptomatics?
Differential diagnosis:
- paroxysms pains
- nocturnal pain
- sensory impairment

- liposarcoma
- neurofibroma
- cyst
- endométriosi
Associated signs not excluding the diagnosis

- Buttock pain and referred sciatic pain on sitting
- Suprapublic pain
- Urinary frequency and/or pain on a full bladder
- Pain occurring after ejaculation
- Dyspareunia and/or pain after sexual intercourse
- Erectile dysfunction
- Normal clinical neurophysiology
Rôle des muscles: obturateur interne et piriforme

- Un chef fessier en rapport avec le sciatique et le nerf cutané postérieur de la cuisse

- Un chef pelvien en rapport avec le nerf pudendal et avec le nerf obturateur
Vue dorsale dte des muscles profonds de la région glutéale.
Muscles piriforme et obturateur interne

Muscle piriforme

Muscle obturateur interne

5cm
To understand the signs of diffusion

• **Peripheral**
  
  – Reached neuropathic neighborhood (common conflict)
    
    • Posterior cutaneous nerve of the thigh /scitica
    • Obturaor nerve
    • glutéal inferior nerve
  
  – Muscular pain
    
    • Internal obturator muscle
    • Piriformis
    • Elevator ani
consequences of chronic neuropathic pain

- Central hypersensitization
  - Spreading the pain
  - Vegetative: urinary, digestive, sexual
- complexe regional pain syndrome
  - Pressure bone pain
  - Vasomotor disorders, allodynia
- Emotional distress
Differential diagnosis: inferior cluneal nevralgia

Terr. cluné

Terr. pudendal
How to assess?

• No symptom questionnaire adapted

• Specific difficulties
  – How to assess pain positional?
  – Increases during the day?
  – May increase after defecation
  – Périods without pain
  – Specific impact of the inability to sit

• Non specifically
  – During last week: VAS or NS
    • Maximum pain
    • Minimum pain
    • Pain average
    • Average maximum daily pain
Specific evaluation

• Sitting position
  - Time of onset of pain in the day
  - Time to onset of pain when seated normal
  - Time base station possible in the day, with or without cushion
  - % of time of day without pain

• Sexuality
  - % alteration

• Impaired quality of life
  - % Of impaired quality of life related to pain
Conclusions

• pudendal nerve entrapment: simple diagnostic criteria and purely clinical

• Used to establish treatment guidelines

• Assesses homogeneous groups of patients are essential to clinical research protocols

• Criteria for evaluating current treatments:
  - % Improvement before and after
  - Satisfaction