



Review

Diagnostic and therapeutic algorithm for pudendal nerve entrapment syndrome[☆]

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ABSTRACT

Pudendal nerve entrapment syndrome is widely unknown and often misdiagnosed or confused with other pelvic floor diseases. The aim is to develop a diagnostic and therapeutic algorithm based on a review of the existing literature. For its diagnosis, an anamnesis will be carried out in search of possible aetiologies, surgical history, and history of pain, assessing location and irradiation, intensity on the visual analogue scale, timing, triggering factors and rule out alarm signs. A physical examination will be performed, looking for trigger points or areas of fibrosis with transvaginal/transrectal palpation of the terminal branches of the nerve. With a doubtful diagnosis, an anaesthetic block of the pudendal nerve can be performed. Once the diagnosis is confirmed, the treatment will begin staggered with lifestyle changes, drug therapy and physiotherapy. In view of the failure of these measures, invasive therapies such as botulinum toxin injection, pulsed radiofrequency and decompression surgery or spinal cord stimulation will be used.

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Algoritmo diagnóstico y terapéutico del síndrome de atrapamiento del nervio pudendo

RESUMEN

El síndrome de atrapamiento del nervio pudendo es poco conocido y suele confundirse con otros trastornos del suelo pélvico. Se pretende elaborar un algoritmo diagnóstico y terapéutico basado en una revisión de la bibliografía existente. Para su diagnóstico se realizará una anamnesis en busca de posibles etiologías, antecedentes quirúrgicos e historia del dolor valorando localización e irradiación, intensidad en la escala visual analógica, temporalidad, factores desencadenantes y se descartarán siempre signos de alarma. Se realizará exploración física, buscando puntos gatillo o zonas de fibrosis con palpación transvaginal/transrectal de las ramas terminales del nervio. Ante un diagnóstico dudoso se puede llevar a cabo un bloqueo anestésico del nervio pudendo. Confirmado el diagnóstico, se comenzará el tratamiento escalonadamente con cambios en el estilo de vida, terapia farmacológica y fisioterapia. Ante el fracaso de estas medidas se emplearán terapias invasivas como inyección de toxina botulínica, radiofrecuencia pulsada y cirugía de descompresión o estimulación del cono medular.

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Palabras clave:

Neuralgia del nervio pudendo

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Lesión del nervio pudendo

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Descompresión del nervio pudendo

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Introduction

The pudendal nerve provides motor innervation to the muscles of all planes of the perineum and collects sensory information from the integuments of the perineum, penis, clitoris, scrotum, labia majora and minora, perineal membrane, urethra, and anus. In addition, it controls erection and voluntary sphincters (urethra and anus) and is also thought to be involved in sensation during sexual intercourse, masturbation, and the urge to urinate.^{1,2} Along

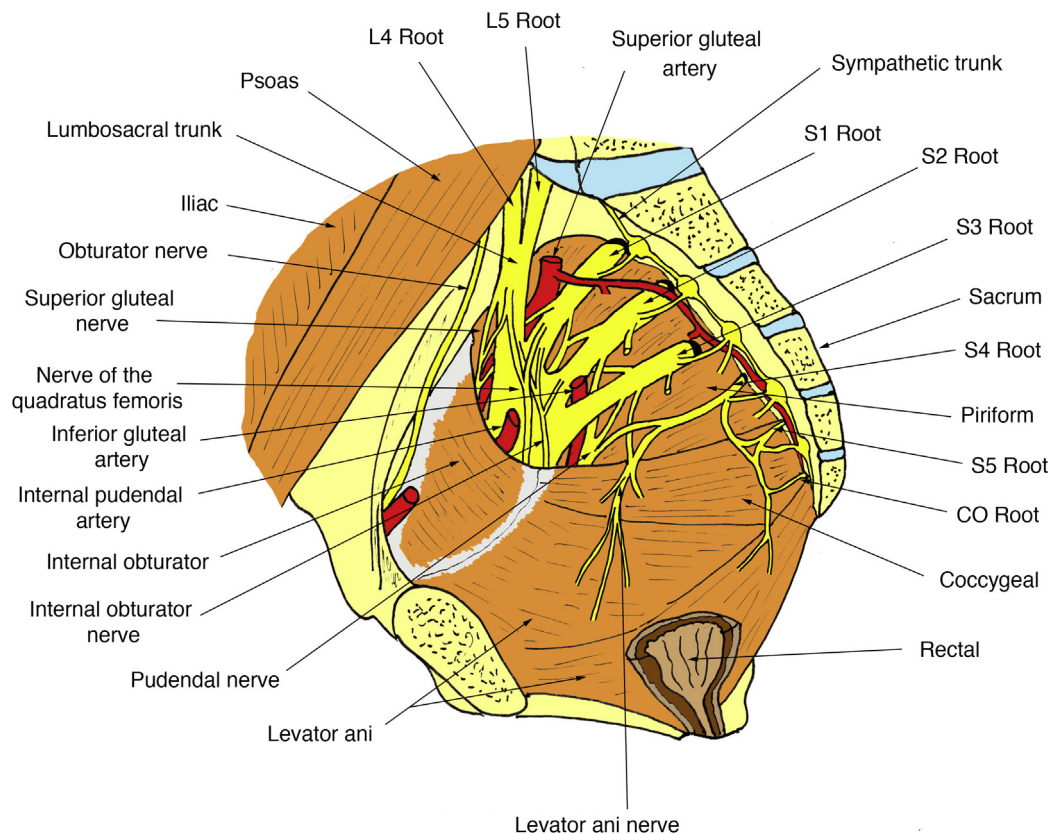


Fig. 1. Anatomical location of the pudendal nerve. Source: Benito J. Cuadernos de anatomía. Aparato locomotor volumen 1. 1.^a ed. Zaragoza: Prensas de la Universidad de Zaragoza (Vicerrectorado de Cultura y Proyección Social); 2020.

its course it passes through intricate structures where it can easily become entrapped. Pudendal nerve entrapment (PNE) is a disorder that affects the quality of life of those who suffer from it. It is often misdiagnosed or confused with other pelvic floor disorders with which it shares symptoms. It was first described in 1982 (patient with perineal neuropathic symptoms due to a neurofibroma).³ Dr. Amarencio (1987) made it known when a cyclist presenting with neuralgia in the pudendal nerve territory came to his clinic, defining this disorder as a perineal paralysis of cyclists.⁴ There are currently no published studies evaluating its prevalence or incidence. Regarding its distribution by sex, it has been observed in both men and women, predominantly in females (60%).⁵ The mean time for diagnosis is 4 years, with a range of 1–15 years. Before diagnosis, the number of doctors seen ranged between 10 and 30.^{6,7} This condition manifests as a neuralgia of the pudendal nerve, causing neuropathic pain along its course, which is exacerbated by sitting and relieved by lying down, standing or walking. In addition, up to 30% of patients have motor symptoms, in the form of incontinence and/or pain with urination and/or defecation due to involvement of the external sphincters and levator ani muscle. They may also suffer from impaired sexual function due to pain and/or decreased sensation in the genitals and may even suffer from anorgasmia.⁸ It is important to distinguish the term PNE from the nosological entity of pudendal neuralgia. By the latter we mean the presence of pain in the pudendal nerve territory, while PNE could be reserved for cases in which there is some kind of anatomical condition that implies pudendal nerve damage (Fig. 1).

The 3 critical points for pudendal nerve entrapment are: entrapment between the sacrotuberous and sacrospinous ligaments, Alcock's canal and the falciform process^{9–12} (Fig. 2).

The most common point of compression is the ischial spine, at the attachment site of the sacrospinous ligament. In this area,

the pudendal nerve is trapped both ventrally by the sacrospinous ligament and dorsally by the sacrotuberous ligament, which is especially thick in this area. Clinically, we would suspect entrapment in this region in the presence of perineal and lower limb pain, which may also be associated with motor deficits.⁸ This is because in this region there may also be entrapment of the sciatic nerve, the inferior gluteal nerve, and the posterior femoral cutaneous nerve, nerves that cross the greater sciatic foramen and innervate the lower limbs.

The second point where entrapment occurs most commonly is along Alcock's canal, where the pudendal nerve runs over the upper edge of the falciform process of the sacrotuberous ligament.^{8,10} This situation may be aggravated if there is a thickening of the duplication in the obturator fascia.¹² Compression at this point takes the name of Alcock's canal syndrome and, although it is not the most common aetiology of neurogenic pelvic disorders, it is the most researched and popular due to its accessibility for neurophysiological examinations, infiltrations and surgical decompression.¹³ This syndrome is characterized by chronic neuropathic pain that worsens with sitting.¹⁴ Kaur and Singh¹⁵ have classified PNE into 4 types according to the level of compression: type I: entrapment under the piriformis muscle when the pudendal nerve exits the greater sciatic notch; type II: entrapment between the sacrotuberous and sacrospinous ligaments; type III: entrapment in the Alcock canal; and type IV: entrapment of terminal branches.

Recently, it has been discovered that not only can compression occur by musculoskeletal or ligamentous structures, but entrapment in the pelvis can occur due to the so-called intrapelvic "neurovascular conflict". This is due to the location of the pelvic nerves that run together with the large pelvic vessels.¹³

The main objective of this work is to develop a diagnostic and therapeutic algorithm for PNE, adapting the literature to clinical

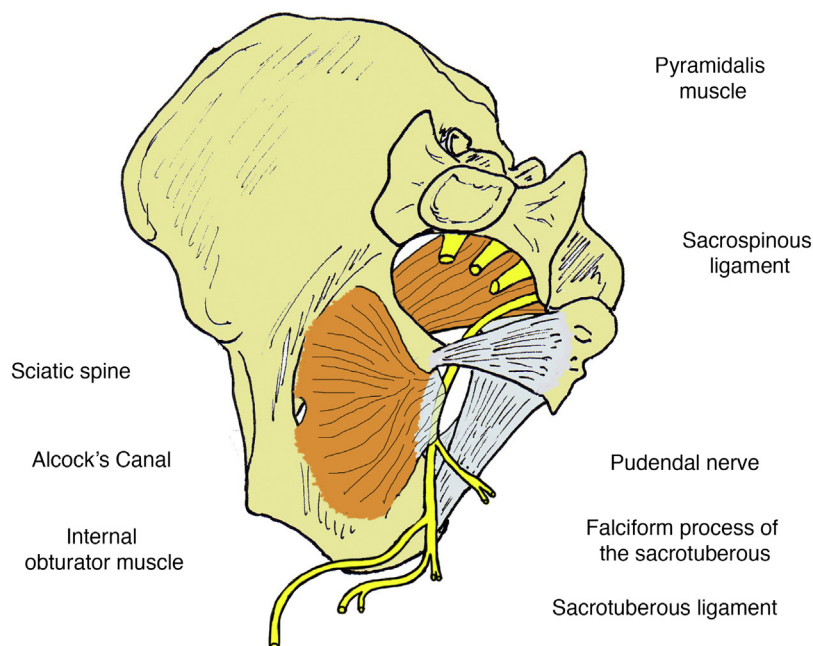


Fig. 2. Critical points of pudendal nerve entrapment: entrapment between the sacrotuberous and sacrospinous ligaments, Alcock's canal and falciform process. Image courtesy of Dr. Jesús Benito.

practice. The aim is to facilitate the differential diagnosis of pelvic floor pain for health professionals, thus avoiding diagnostic delay and the pilgrimage of patients through several professionals for years. The typical symptoms of this disorder and its most common aetiology will be presented in order to facilitate clinical recognition and patient management in order to improve their quality of life.

Methods

In order to establish the diagnostic and therapeutic possibilities, a narrative review of the existing literature was carried out in Pubmed using the terms “Pudendal neuralgia”, “Pudendal nerve entrapment syndrome”, “Chronic pelvic pain”, “Pudendal nerve injury”, “Myofascial pelvic pain”, “Pelvic floor dysfunction” and “Pudendal nerve decompression”. No time criterion has been established for the choice of articles as the historical evolution of this disorder is considered important for the study.

Results

Aetiology

The pudendal nerve can be damaged by very different mechanisms, but its entrapment is especially important, which can be produced by musculoskeletal structure compression¹¹ or neurovascular causes (‘intrapelvic neurovascular conflict’).^{13,16} Births (stretching of the nerve in complicated deliveries) and pelvic surgeries are also common causes of this process: proctological (hemorrhoidal surgery), urological (prostatectomies) and gynaecological (episiotomies) interventions. Chronic constipation is one of the first causes reported as a trigger for PNE. Another cause that is gaining importance are repeated microtrauma, usually due to sports practice during youth, which can lead to an inadequate development of the spinous process of the ischium, leading to compressive neuropathy.⁶ The sport with which it has been traditionally associated is cycling,⁴ but cases associated with physical exercise have also been described (Alcock syndrome due to fibrosis of the obturator internus muscle in a gymnast,¹⁴ after practicing Pilates¹⁷). Damage may also be caused by inflamma-

tory or autoimmune processes. Space-occupying lesions are a rare cause. Neurofibromas³ and ganglion cysts¹⁸ have been described as causes. In both, pain disappeared after lesion removal. Tumors of the ischioanal fossa are more significant due to their aggressiveness. They should be suspected in the face of warning signs such as pain “at the tip of the finger” (may indicate a neuroma), which awakens the patient at night or associated with neurological deficit. Given these symptoms, an MRI should be performed.¹⁹ Lastly, trauma surgery would be implicated in reversible pudendal nerve lesions (pudendal nerve neurapraxia). It is the main complication of hip arthroscopy and is related to the traction time of the lower limb during the intervention.²⁰ It is a temporary lesion, which resolves between 3 weeks and 6 months after surgery.²¹ Its frequency varies between 1.8% and 27.8% depending on the authors consulted.²²

Diagnosis

The diagnosis of PNE is a complex process given the multiple branches of the nerve, its anatomical variation, and its unclear aetiology. When making the differential diagnosis, disorders such as myofascial pelvic pain syndrome, vulvodynia, chronic prostatitis,²³ prostatodynia, interstitial cystitis²⁴ and Tarlov cysts²⁵ must be considered. The similarity between the symptoms of these conditions and their coexistence with some of these disorders makes its differential diagnosis very complex.^{26,27} For this reason, it is important that the assessment and evaluation of this condition is carried out in a multidisciplinary manner by different specialties (Care guidelines of the Spanish Society of Gynaecology and Obstetrics).²⁸

The initial clinical suspicion can be raised through targeted questions collected in the PNE questionnaire²⁹ (Table 1). A very characteristic feature of these patients is that the pain increases when sitting on flat surfaces and is associated with other clinical manifestations such as urinary symptoms (especially irritative), sexual dysfunction and mixed incontinence.

Physical examination is usually unremarkable, although sore, contracted, and shortened muscles may be found, with trigger points, taut bands, and increased tone.^{6,30} This is also compatible with the diagnosis of pelvic myofascial pain syndrome, both disor-

Table 1
PNE questionnaire (pudendal nerve entrapment).

1. How long have you been in pain? (express it in days, months, or years)
2. Is there an event that coincided with the onset of pain?
3. How painful is it? (rate it from 0, no pain, to 10, maximum pain)
4. Is the pain: burning, pulling, crushing, pressing, piercing, cutting, other? (choose one or more options)
5. Is the pain greater on one side of the perineal region than the other?
6. Do you have pain in the buttocks area?
7. Do you have vaginal discomfort?
8. Do you have pain in the labia or vulva?
9. Is the pain worse when sitting?
10. Is sitting in the bathroom not as painful as sitting on a flat surface?
11. Does the pain get better when standing?
12. Does the pain improve when lying down?
13. Is the pain worse when lying on one side than the other?
14. Do you have pain during bowel movements?
15. Do you have pain when having sex?
16. Is there pain when urinating?
17. Do you have problems controlling your bladder?
18. Do you have problems controlling your bowel movements?
19. Do you have problems controlling the expulsion of gases?

Source: Ramsden et al.²⁹

Except for questions 1, 3 and 4 (where it is specified what to answer), the patient has to answer yes or no.

ders being able to coexist or trigger each other.⁶ Increased pelvic floor muscle tone due to a reflex-like muscle reaction is also characteristic, with pain on palpation of the outlet of Alcock's canal, which is considered significant if there is a positive Tinel's sign³¹ (pain occurs on compression of the pudendal nerve trunk at the anatomical location of the affected area). In advanced cases, decreased sensitivity may even be found in the perineal and anal region.

Classically, the diagnosis has been based on subjective clinical criteria based on suggestive clinical features (there is no pathognomonic sign), with the Nantes criteria being the most widely used³² (Table 2). These criteria include: (1) pain in the pudendal nerve's anatomical distribution; (2) worsening of symptoms while sitting; (3) the pain does not wake the patient at night; (4) absence of sensory deficits on clinical examination, and (5) pain relief with a diagnostic pudendal nerve block. Exclusion criteria were the existence of pain limited to the coccygeal, gluteal, or hypogastric area, paroxysmal pain or pruritus and the finding of other causes by imaging techniques.

These criteria are currently considered not sufficient, as they can only be applied in the presence of typical perineal pain,³³ which is a rare form of presentation. In most cases, patients present with significant hyperalgesia and allodynia that hinder examination, rather than the sensory deficits previously described. In addition, pain may have an atypical distribution (symmetrical and bilateral) because these patients associate myofascial pathology secondary to adaptive disorders (stress, anxiety, etc.), due to delayed diagnosis and poor disease progression.³⁴

Sometimes the same entity can have different names depending on the department that performs the diagnosis, which could be avoided if a multidisciplinary approach were implemented in this type of cases (gynaecology, urology, trauma, physiotherapy, etc.) or if specialized Pelvic Floor Units could be established (already existing in various centres).

Regarding ancillary tests, there is no gold standard for the diagnosis of PNE. Therefore, there is no consensus on which tests to perform routinely. High-resolution ultrasound diagnosis is gaining increasing importance, since it is a bloodless and comfortable technique for the patient and, in cases of clinical suspicion, it identifies morphological nerve abnormalities in 70% of cases. It has been shown that the best approach to visualize the nerve as it passes through the ischial tuberosity is medial, and the anterior approach is preferred to visualize the terminal branches. Its disadvantage is

Table 2
Nantes criteria.

- Essential criteria*
1. Pain in the course of the pudendal nerve: from the anus to the penis or clitoris
 2. Pain is more intense when sitting
 3. Pain does not wake patient at night
 4. Pain without measurable sensory disturbances
 5. Pain relief with diagnostic pudendal nerve block
- Complementary criteria*
1. Pain of neuropathic characteristics (burning, stabbing, cramping)
 2. Allodynia or hyperpathia
 3. Foreign body sensation in rectum or vagina (sympathalgia)
 4. Worsening pain throughout the day
 5. Predominantly unilateral pain
 6. Pain triggered by defecation
 7. Very severe pain on palpation of the ischial spine
 8. Findings on neurophysiological tests in men or nulliparous women
- Exclusion criteria*
- Pain limited to the coccygeal, gluteal, or hypogastric area
 - Exclusively paroxysmal pain
 - Itching
 - Finding of other causes in imaging techniques
- Associated signs that do not exclude the diagnosis*
- Pain in the buttocks with sitting
 - Sciatica referred pain
 - Pain referred to the medial thigh region
 - Suprapubic pain
 - Increased urination frequency and/or pain with a full bladder
 - Pain after ejaculation
 - Dyspareunia and/or pain after sexual intercourse
 - Erectile dysfunction
 - Normal neurophysiological studies

Source: Labat et al.³²

In the presence of the 4 essential diagnostic criteria, it is recommended to perform anaesthetic block of the pudendal nerve. If the block is positive, the clinical suspicion will be strong (5th criterion).

that the results depend on the observer and the characteristics of the patient.³⁵

The use of Doppler ultrasound of the pelvic and perineal blood vessels improves the sensitivity and specificity of the technique, achieving a high negative predictive value (the entrapment syndrome is ruled out if there is no blood flow abnormality). Mollo et al.³⁶ compare its effectiveness with traditional tests (electromyographic and electroneurographic tests, diagnostic criteria, and surgical outcomes) obtaining promising results. Regarding imaging tests, magnetic resonance imaging is a more objective technique than ultrasound and is recommended when malignancy is suspected.¹⁶ Recent studies demonstrate the usefulness of magnetic resonance neurography for the visualization of pudendal nerve branches.^{37–41}

Neurophysiological tests are used less and less in the initial diagnosis since they do not allow early diagnosis and the results may not correlate with functionality.⁴² In addition, they are less sensitive compared to ultrasound. Finally, when nerve compression is suspected, laparoscopic examination can be useful as a diagnostic and therapeutic method. It is a safe technique with a high success rate, as long as there is a high suspicion of non-neurogenic neuropathic pain.⁸ However, it is estimated that between 25 and 40% of women who undergo laparoscopic surgery for pelvic pain do not have a clear structural diagnosis,³⁰ hence, the technique will not be effective.

Treatment

The management of pudendal nerve neuralgia should be sequential, beginning with conservative measures such as lifestyle modifications, analgesics, pelvic floor physiotherapy,^{37,38} osteopathic manipulative therapy (recently shown to reduce rates of pelvic neuralgia and disability without complications⁴³) and drug

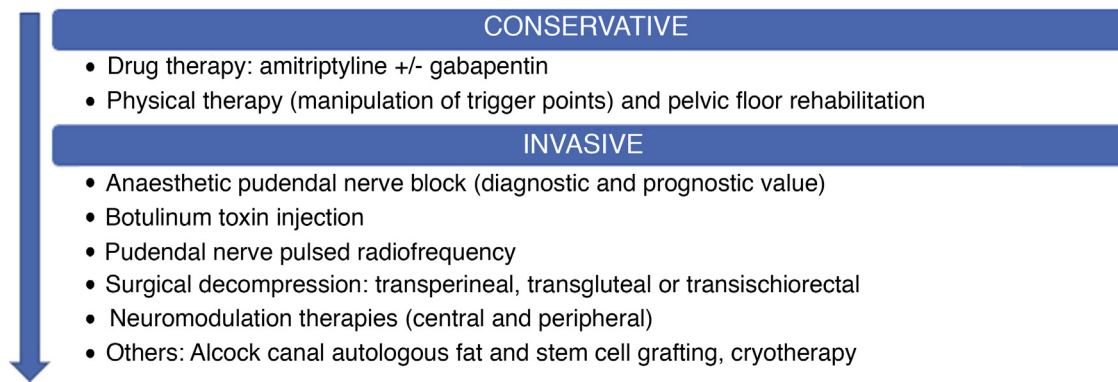


Fig. 3. Sequential treatment.

therapy with tricyclic antidepressants and anticonvulsants being the agents of choice. Subsequently, the treatment will be scaled up, with increasingly invasive measures such as anaesthetic pudendal nerve block, botulinum toxin injections, surgical decompression, radiofrequency, and neuromodulation therapies (central neurostimulation and peripheral nerve stimulation techniques)^{44,45} (Fig. 3).

Although there is some agreement regarding conservative treatment, the management of drug-resistant pudendal nerve neuralgia (so called when treatment with antidepressants and anticonvulsant therapy fails) is not well defined. A systematic review of drug-resistant pudendal neuralgia treatments comparing different techniques (pudendal nerve infiltration, cryotherapy, autologous fat grafting, radiofrequency, sacral neurostimulation, conus medullaris stimulation and surgical decompression from different approaches) obtained great heterogeneity in its results, detecting a lack of long-term follow-up in these patients. Therefore, they conclude that no recommendation can be established to determine the best strategy, suggesting further studies on the management of these disorders.⁴⁶

Conservative treatment

The main goal of treatment is pain relief. As it is considered a neuropathic pain, the drug of choice is an antidepressant, specifically amitriptyline, although its use is not supported by quality studies.⁴⁷ This is also the treatment of choice for vulvodynia, so it would be useful in cases where the differential diagnosis is unclear. Given a poor response to amitriptyline, its combined use with gabapentin has been shown to be more effective.⁴⁸

Prognostic factors that indicate a poor response to first-line treatment have been described: pain duration in years, involvement of the nerve's terminal branches, specifically the perineal nerve and/or the dorsal nerve of the clitoris, and the radiation of pain to the lower limbs.⁴⁹

Invasive treatment

Given the failure of conservative measures, the first invasive technique to be performed is usually pudendal nerve blocks through glucocorticoid and lidocaine/levobupivacaine infiltrations in the interligamentous space and Alcock's canal.⁶ It improves symptoms almost immediately, aiding relaxation of hypertonic sphincters, relieves bladder symptoms and normalises sexual dysfunction, although the duration and degree of improvement depends on the underlying lesion and the anatomy of each patient. This technique is normally performed with 5 ml of 1 or 2% lidocaine, although there is no consensus on the dose or the injection site. This procedure should be performed before moving on to more aggressive interventions because of its diagnostic and prognostic value, since, if the result is positive, pudendal nerve involvement will be

confirmed, and if not, the aetiology will remain unclear¹². Infiltration has also been performed using a combination of fast-acting and slow-acting anaesthetics (1 ml of 1% lidocaine hydrochloride and 2 ml of ropivacaine hydrochloride, the latter with less motor effect, causing fewer symptoms of paresis after blocking treatment) together with a half dose of cortivazol (3.75 mg).⁵⁰ The result is considered positive when the patient experiences a pain reduction greater than 50% in while sitting immediately after the infiltration. In cases of absence of response, surgical decompression would not be a therapeutic option and other aetiologies would have to be considered.⁵ Pudendal nerve injection is a safe and simple procedure that can provide accurate diagnosis and transient relief from this chronic and debilitating condition and help to identify patients suitable for pudendal nerve decompression.⁵¹

An increasingly used technique in cases of chronic pelvic pain, especially in cases of pelvic floor spasms, is the injection of botulinum toxin A. There is no consensus on its use, or on the injection site, or on the dose.^{52,53}

Pulsed radiofrequency of the pudendal nerve is a technique that is gaining popularity in clinical practice, since it has been shown to improve pain in 86.9% of patients, it is minimally invasive and quite safe, so it can be a good option for high-risk surgical patients. However, its effect usually lasts between 1–6 months, so it must be repeated when the symptomatic relief subsides.^{33,54} It can be used in combination with nerve blocks, increasing its efficacy⁵⁵. It is indicated in cases of severe pain (visual analogue scale > 5) and positive response to anaesthetic block. A transgluteal CT-guided technique is recommended in this case.³⁸ Sensory stimulation is performed at 50 Hz with 0.1–0.8 V voltage (varies according to the authors),^{12,38} which has to produce paraesthesia along the distribution of the pudendal nerve to confirm that it is a sensory branch and not a motor branch.¹² Once confirmed, radiofrequency ablation therapy is performed consisting of 2 cycles at 42 °C, 120–240 s.^{38,56} Pulsed radiofrequency causes a significant improvement in pain, which lasts for up to a year.¹²

Although all these treatments are accepted, the only one that has been validated in a randomized clinical trial, comparing it with the treatment of choice, is surgical decompression,⁵⁴ which is recommended after drug therapy failure.⁵ Different surgical approaches have been described: transperineal, transischioirectal and transgluteal⁶ (the latter has demonstrated superiority in a randomized clinical trial⁵⁷), as well as transabdominal access by laparoscopic surgery or even robotic surgery, which have been shown to be useful and safe in performing nerve decompression (neurolysis).^{58,59} It is often used in extreme cases and the results are not brilliant, but it is not a complex technique. The choice of one or the other will be made according to the characteristics of the patient and the experience of the surgeon, since it is considered that all have the same efficacy.

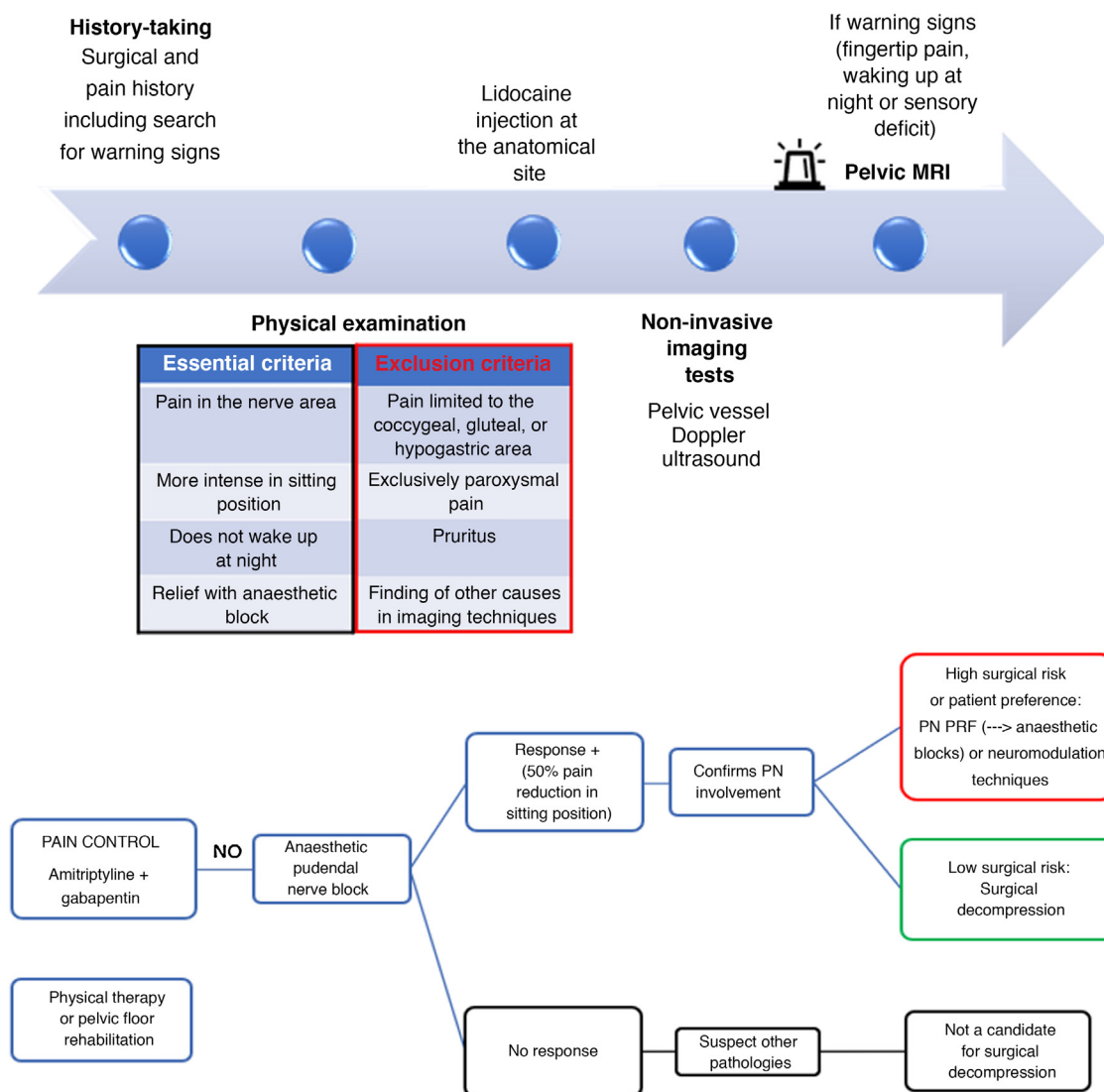


Fig. 4. Diagnosis and treatment algorithm outline for PNE. PN: pudendal nerve; PRF: pulsed radiofrequency; MRI: magnetic resonance imaging.

In cases where it is indicated, it is recommended to perform surgery as soon as possible, avoiding repeat injections, to limit the risk of central sensitization and chronic pain syndrome.⁶

In cases where conservative options do not provide pain relief and surgical procedures fail or are not feasible, central, or peripheral nerve stimulation may be an alternative treatment.

Epidural stimulation of the conus medullaris has shown long-term efficacy in prospective studies,⁴⁵ however, it is not possible to reach an agreement regarding the stimulator's site, since the conus medullaris can move, leading to treatment failure. To this end, new peripheral nerve stimulation strategies have been proposed through the use of an electrode located close to the pudendal nerve in the ischioanal fossa.⁶⁰ These neuromodulation techniques show promising results in preliminary studies, but larger scale studies are needed to confirm their effectiveness.⁶⁰

Lastly, the newest treatment lines rely on Alcock's canal autologous fat and stem cell grafting. This technique is based on the transperineal injection of autologous adipose tissue with stem cells, along the Alcock's canal. It is an easy-to-perform procedure with a low risk of complications and provides significant short-term symptom improvement, but controlled studies with long-term follow-up are needed to confirm its effectiveness.⁶¹

Discussion

PNE is an inadequately diagnosed disorder and there is no consensus as to which speciality should be responsible for it. Therefore, the following is a proposal for a diagnostic and therapeutic algorithm for PNE structured on the basis of the literature review (Fig. 4). For the diagnosis of PNE, it is recommended to carry out a thorough history-taking in search of possible aetiologies, investigating the surgical history and a history of pain, assessing the location and radiation of the pain, its intensity in the visual analogue scale, temporality, triggering factors and always ruling out warning signs. It is also essential to carry out a proper physical examination, looking for possible trigger points or areas of fibrosis with transvaginal or transrectal palpation of the terminal branches of the nerve. If the diagnosis is in doubt, an anaesthetic pudendal nerve block (local) can be performed, which, if positive, will confirm that it is a PNE and the possible surgical indication for the patient. Non-invasive ancillary tests such as transrectal or transvaginal Doppler ultrasound can be performed to study the aetiology. Electrophysiological studies have been relegated to the background because they are not useful for the early diagnosis of the disease and magnetic resonance imaging is used to rule out a malignant pathology in the event of warning symptoms.

Once the diagnosis of pudendal nerve neuralgia has been confirmed, treatment will begin in a stepwise manner, starting with changes in lifestyle, drug therapy (treatment of choice with antidepressants, specifically amitriptyline, which increases its potency if administered concomitantly with gabapentin) and physical therapy (pelvic floor rehabilitation). If conservative measures fail, invasive therapies such as botulinum toxin injection, pulsed radiofrequency (indicated if the response to nerve block is positive) and decompression surgery will be used. In cases where the patient is not a candidate for surgery, treatment with pulsed radiofrequency (supported or not by anaesthetic pudendal nerve block) or neurostimulation therapy may be proposed.

Conclusions

PNE seriously affects the quality of life of patients; it is an underdiagnosed pathology due to its complex differential diagnosis, since its symptoms overlap with those of other perineal disorders, and because patients do not report all symptoms as they do not feel comfortable talking about them. The lack of evidence and consensus in the management of this pathology is clear, from its diagnosis to its treatment. In the absence of clear protocols, the proposed algorithm can be of great clinical utility. For the most efficient and effective control of patients, it is important to refer them to specific and specialised Pelvic Floor Units, which already exist in various centres, or if these are not available, it is important to decide which speciality or interdisciplinary group will be in charge of the management of this disorder and thus avoid the constant pilgrimage of these patients.

Authorship

The authors declare the following contributions to the conduct of the study: conception and design of the study (LMJ, FJ), acquisition and analysis and interpretation of data (GI), writing of the manuscript (LMJ, GI), critical review of the manuscript for important intellectual content (LMJ, FJ) and final approval of the manuscript (all authors).

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Conflict of interests

The authors declare no conflict of interest.

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