

INFORMATION LEAFLET  
ON  
PUDENDAL NEURALGIA

# **PELVIC PAIN : Silent Sufferers**

**Are you Bottling it all in?**



# PUDENDAL NERUOPATHY OR PUDENDAL NEURALGIA (PN)

## What is Pudendal Neuralgia/ Neuropathy (PN)?

Pudendal nerve is one of the main nerves of the pelvis, with one nerve on each side. It runs from the lower back, along the pelvic floor to supply the genitals, lower part of rectum, and perineum (area between the sit bones). This nerve is closely involved with urinary and bowel functions.

Pudendal neuralgia is a condition related to irritation or damage of pudendal nerve, which presents as pain or altered sensation in the genital, rectal region or deep inside the pelvis. This condition can be very distressing, disabling, significantly impairing the quality of life. It is more common in women and is also addressed as cyclist syndrome, Alcock's canal syndrome and pudendal nerve entrapment. Despite the significant advances in the evaluation and management of chronic pelvic pain in the past decade, it often goes unrecognised.

PN can be associated with other conditions such as Chronic Pelvic Pain Syndrome, dysfunctional voiding, painful bladder syndrome, chronic prostatitis etc. Due to the varied symptoms the patients may present to a number of different specialists including gynaecologists, urologists, colorectal surgeons, general surgeons, internal medicine specialists and neurologists.

## What are the signs and symptoms of Pudendal Neuralgia?

The most common complaint is pelvic pain in the areas supplied by the pudendal nerve. Pain generally is

Burning, shooting, electric shock like, crushing, aching, prickling or itching sensation

Worse on sitting or exercising and resolves when lying flat (as during the night) or standing

Better when sitting on the toilet seat

Intermittent initially but can change to a constant pain with time

It can radiate (travel) to buttocks (around ischial spines) and legs (inner thigh), feet

Other symptom which may be present include

Urge to go to the toilet often (urinary frequency) or a feeling of a bladder infection, pain on passing urine

Increased sensitivity in pelvic area

Numbness, pins and needles sensation in pelvis

Pain during sex or sexual arousal or orgasm/ ejaculation.

It sometimes presents as persistent sexual arousal

Foreign body/fullness sensation in rectum, vagina or perineum (like a tennis ball)

Rectal pain with an urgent need to open the bowels



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## What causes Pudendal Neuralgia (PN)?

PN may arise as a result of

1. Compression or entrapment of pudendal nerve (cycling, prolonged sitting, pelvic floor muscle spasm, any growth pressing on nerve or pressure on nerve as it emerges from below the piriformis muscle)
2. Stretching of PN (childbirth, surgery)
3. Direct Injury to pudendal nerve anywhere along its path (pelvic trauma, falls on the buttock or back, severe constipation)
4. Compression at the level of spinal cord or nerve roots
5. Biochemical injury from infections and diseases (diabetes, multiple sclerosis , viral infection- herpes zoster, HIV)

PN can be related to intense exercise of pelvic floor and neighbouring muscles such as during pelvic floor strengthening exercises, hip adductor exercises, cycling, weight lifting with squats, lunges, climbing stairs and those involving rapid flexion of the body at the trunk or hip flexion. Cycling can result in prolonged pressure on inner side of ischial tuberosity (sit bone) causing nerve compression.

Childbirth and the associated stretching of the nerve during delivery can be associated with the development of this condition. Some of the predisposing factors include prolonged second stage of labour, vaginal delivery requiring forceps assistance and previous pelvic floor injury.

Some gynaecological, colorectal, orthopaedic and urology surgical procedures can lead to pudendal neuralgia for example repair of pelvic organ prolapsed especially those involving mesh insertion and sacrospinous ligament fixation, hysterectomy, hip arthroscopy, orthopaedic procedures requiring traction, radical prostatectomy etc. Anatomical variations where the nerve travels through the ligaments rather than passing in-between them can also predispose to compression/ injury.

## How is PN diagnosed?

PN can be challenging to diagnose as there are no specific tests. A combination of history, examination and investigations are used to diagnose PN. Most patients present with pain in the area supplied by the pudendal nerve, which worsens on sitting. It generally worsens as the day goes on and resolves during the night.

Physical examination helps to confirm that the pain is in the area supplied by the nerve and helps to identify any altered sensations. Other neighbouring areas such as the lower spine, abdomen, sacrum,



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coccyx and the surrounding muscles including that of pelvic floor are also evaluated. Tenderness/ tingling on pressure on the inner side of sit bones (ischial tuberosity) or underneath the pubic bone may indicate a problem originating from the pudendal nerve.

Investigations are requested to support the diagnosis and rule out other conditions which may present similarly. They may include MRI scans, doppler ultrasound, pudendal nerve motor terminal latency (PNMTL). Advances in MRI including neurography now allow for good visualization of the pudendal nerve and its branches and in experienced hands can aid the process of diagnosis.

Resolution of pain a diagnostic nerve block, even if temporary, supports the diagnosis of pudendal neuralgia. These blocks also serve an important therapeutic role. Image guided blocks using fluoroscopy, ultrasound or CT scan is preferred.

## How is PN treated?

Management of this condition requires active patient participation and use of a combination of lifestyle changes, medical interventions. Pudendal neuralgia can get worse if left untreated and early treatment may be more effective. Treatment includes

1. Lifestyle changes are aimed at reducing the irritation of the nerve. These include avoiding activities which increase pain such as cycling, prolonged sitting etc, using a special cushion while sitting, avoiding constipation by food modification (increase fibre intake such as fresh fruit, vegetables, wholemeal breads and drink plenty of water etc.
2. Neuropathic pain killers- these can help in reducing the pain
3. Injections such as pudendal nerve block, pelvic floor muscle or tender point injections  
Often a series of injections are performed for maximal benefit.
4. Pulsed radio-frequency treatment of the pudendal nerve, sacral nerve roots for pain modulation
5. Supervised Physiotherapy aimed at the pelvic floor muscles. This can help with muscle spasms, imbalances and in correcting other dysfunctions
6. Psychological support including cognitive behaviour therapy, meditation, mindfulness, self management and relaxation exercises
7. For severe cases not responding to above measures, neuromodulation or pudendal nerve release surgery can be considered

For more information on Pudendal Nerve Block please refer to the patient information leaflet.