

?IDIOPATHIC' PELVIC PAIN

Possible overlooked organic neurological causes:

Lumbosacral plexopathy including Cauda Equina Syndrome

Pudendal neuralgia

Perineal neuralgia

Pelvic pain may arise through local trauma as well as a number of medical conditions such as iliac artery aneurysm.

However, in situations where there has been recent surgery, one must bear in mind adverse effects from (a) epidural/spinal anaesthesia and (b) positioning during the procedure. (lithotomy position, for example, may be linked with a higher incidence of pooling of anaesthetic in the cauda equina region).

One must also factor in the effect of urinary catheterisation should this have been necessary.

Pain/paraesthesia in the perineal area, plus disturbances in bladder/bowel/sexual function would suggest a *cauda equina* lesion. Whilst it is a well recognised (though sometimes belatedly so) acute condition, there is also a chronic form.

Cauda Equina Syndrome Severe pain in radicular pattern: back, buttocks, perineum, genitalia, thighs, legs. Note that neuropathic pain is generally persistent, burning in nature and may also

be briefly stabbing/ lancinating and/or electric shock sensation; this type of pain is usually worse at night and, definitively, may be present in areas which have reduced sensation (including numb areas)

- Loss of sensation: often tingling or numbness in the saddle area.
- Weakness: in legs, often asymmetric
- Bladder/bowel/sexual dysfunction: incontinence/ retention of urine; incontinence of faeces; impotence/loss of ejaculation or orgasm
- Loss of reflexes: knee/ankle reflexes may be diminished, as may anal and bulbocavernosus.

Foot pain: The majority of arachnoiditis patients experience burning in the feet, often to the extent of being unable to tolerate footwear of any kind. In addition, many describe a sensation of "walking on broken glass".

Aldrete has described cases of plantar (sole) neuroma which may cause pain on walking.

In his survey, 6.7% of his respondents had this condition. He attributed this to repetitive irritation of the metatarsal nerves due to abnormal gait and foot posture in arachnoiditis patients.

Symptoms of plantar (Morton's) neuroma include: agonising pain in the sole after walking/standing in closed shoes for a period of time; localised pain from which relief is gained by stopping, sitting down and removing footwear and resting or massaging the foot. More diffuse pain may well be from a different source.

Typical descriptions are "like walking on a pebble" or "having a hot poker thrust between the toes". Between attacks, patients may be able to walk without limping.

Other causes of foot pain include plantar fasciitis (heel pain, with inflammation of the thick band of tissue in the sole of the foot); heel pain due to nerve entrapment, heel spur or as part of inflammatory conditions such as rheumatoid arthritis or gout.

Metatarsalgia is a condition in which pain is felt directly under the affected bone (the long bones running towards the toes).

Other Neurological Symptoms

Sensory

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- Tingling and numbness; the tingling may be intense enough to be painful. Numbness is typically incomplete and pain may be felt in the affected area. In the New Zealand survey, 71%, Global survey 86% and Aldrete's survey 81% of respondents reported this symptom. Loss of sensation in the feet requires vigilance for damage (cuts, abrasion, infection) much as in cases of other causes of peripheral neuropathy.

- Loss of proprioception (sense of limb position up or down in relation to ground) causing tripping and falls. Impaired proprioception, especially when combined with a slight or moderate motor weakness, may cause the feeling that the legs are going to collapse. In addition, there may be a sensory ataxia. Together these problems can cause falls and thus fear of future falls, which can lead to a patient becoming less and less mobile, thereby worsening the problem through muscle wasting due to disuse.

- Tinnitus: buzzing/ringing/whistling/hissing/pulsing in the ears with possible heightened sensitivity to external sounds (hyperacusis) (in about 60% of those with tinnitus). May be a feature of the overall CNS hypersensitivity; less than 5% of cases have an ear-related problem. Causes that need to be excluded include Meniere's disease, raised blood pressure, overactive thyroid (note: this can occur in people who have had a myelogram), raised intracranial pressure and salicylate (aspirin) use; note also that caffeine, alcohol and nicotine are associated with tinnitus.

- In the Global survey 44% of respondents had dizziness/vertigo.

Dizziness can encompass a range of sensations, but usually refers to:

- Light-headedness
- Feeling faint/a loss of balance/ unsteady
- Giddiness

Vertigo: vertigo of cervical origin has been described in one paper ([\[1\]](#)), with features of ataxia (unsteady gait). Vertigo refers to a sensation of spinning or falling. Sitting up or moving around may make it worse, and it may be bad enough to cause sickness.

Common causes of dizziness/vertigo or unsteadiness related to arachnoiditis include:

- Medication: including salicylates (aspirin); caffeine; alcohol; anti-seizure drugs (given for pain) sedatives etc.
- Vestibular migraine
- Low blood pressure, abnormal heart rhythm: may cause faintness: a drop in blood pressure on standing (orthostatic hypotension) is a relatively common problem (contributed to by autonomic neuropathy)
- Autonomic neuropathy
- Metabolic disturbance: including low glucose, hypothyroidism
- Allergy

NOTE: If you have developed sudden weakness or tingling/numbness down one side of your body, in association with dizziness, you should seek immediate medical attention to exclude a stroke.

Eye problems: In the 1999 survey, 45% of respondents said they had some sort of visual

problems.

Further investigation revealed that common problems included:

Photoaversion: intolerance of bright light: a very common problem, most often after myelograms or epidural injections; it may be due to hypersensitivity of the nervous system. Specific ocular (eye) causes include: conjunctivitis, uveitis, dry eye;

Dry eyes: A gritty feeling or just sore eyes seems to be a common problem with arachnoiditis.

In a few people, a condition called Sjogren's syndrome may be diagnosed: this involves dry eyes and mouth and joint pains.

Dry eye syndrome is usually due to reduced aqueous tear production (keratoconjunctivitis sicca), reduced quality of the tear film, disorder of the corneal surface or a lid dysfunction.

Other disorders that can cause dry eyes include rheumatoid arthritis and SLE (lupus), connective tissue disorders (sarcoidosis, amyloidosis) and Stevens-Johnson syndrome.

Drugs that may cause reduced tear flow include: diuretics, antihistamines, tricyclic antidepressants (e.g. amitriptyline), oral contraceptive pill, atropine derivatives, and beta-blockers (this list is not comprehensive).

Symptoms include transient blurred vision and aversion to bright lights.

Blurred vision: this is probably most commonly a result of medication such as morphine and related drugs.

Other causes require full ophthalmic assessment. Anticholinergic drugs such as the antidepressant amitriptyline, may affect the ability to focus, as may morphine and related drugs.

Pain around the eye: these can be sharp, lightning pains, which can feel as if they go right through the eye. They can be related to neuralgia.

Eye symptoms in migraine: these may include seeing an 'aura' before onset of the headache.

Conjunctivitis: infective inflammation of the conjunctiva; chronic illness may generally debilitate and therefore predispose to infection.

Less commonly:

Uveitis: inflammation of the eye: if the front of the eye is involved, the eye will be red, and there will be light sensitivity, and some reduction in vision; often it occurs in one eye and there is rapid onset of symptoms; if the back of the eye is affected, these symptoms may not occur, except for reduced vision which can range from mild to severe; both eyes may be affected.

Floater: these are tiny clumps of cells in the fluid behind the pupil (vitreous humour) at the back of the eye, which appear, however, to 'float' in front of the eye. They cast shadows on the retina, the nerve layer at the back of the eye. Floaters may appear as a variety of shapes including dots, lines, cobwebs, circles, clouds.

Generally, they are harmless, but can be a nuisance if they interfere with activities such as reading. Occasionally, new floaters can arise due to *posterior vitreous detachment* which is when the vitreous gel shrinks away from the retina.

This is more common in older middle-aged people who are nearsighted, have undergone cataract surgery, have had previous laser treatment, have had inflammation in the eye or have had head trauma.

Horner's syndrome: often an acute condition which can occur after epidural injection: all the symptoms are on one side of the face. They comprise: drooping eyelid, skin feels warm and dry (no sweating) and pupil constricted. Horner's may also occur if spinal nerve roots in the neck are damaged.

Raeder's syndrome: a combination of pain, drooping eyelid and constricted pupil; there may be a preceding history of episodic pain in or around the eye and cluster headaches. This is a benign condition that may arise during a cluster of headaches and resolving spontaneously once the headaches have ceased.

Adie's Pupil: a 'tonic' (poorly responsive) dilated pupil, which may be associated with a generalised *dysautonomia*, that is, abnormal autonomic functioning which is occasionally seen in patients with arachnoiditis.

Thyroid eye disease: some arachnoiditis patients who have a history of a myelogram (oil or water-based contrast agent) may develop thyroid disorders.

This could be related to the iodine content of the myelogram dye. Hyperthyroid disease may present with eye problems: this is termed *Grave's disease*.

Common symptoms include: eyelid retraction, irritation in the eye, watery eyes (or dry eyes if the eyelid retracts considerably), redness, double vision, pain and reduction in vision.

The eyes may appear to 'bulge' because the fat and muscles around the eye may be infiltrated with antibodies; this may put pressure on the optic nerve, and cause problems with vision. There may be difficulty in moving the gaze around, because the muscles around the eye are not working properly.

Rare problems that may occur:

Optochiasmic arachnoiditis: a particular subtype of arachnoiditis; it may occur after eye surgery. (See above)

Raised intracranial pressure shows up in eye examination as swollen optic disc (where the optic nerve leaves the back of the eye): known as papilloedema. This can result from hydrocephalus (a complication of arachnoiditis) or pseudotumour cerebri (Benign intracranial hypertension).

Some arachnoiditis patients have been told that their eye problems resemble those seen in Multiple sclerosis.

[\[1\]](#) Brandt T *Audiol Neurotol* 1996 Jul-Aug; 1(4): 187-96 Cervical vertigo--reality or fiction?