

Neuralgia can affect any cranial nerve that has somatic afferents, such as n. intermedius.¹ The patient complains of intermittent stabbing pain, like electric shock, deep in the ear. The syndrome is always unilateral and generally seen in the elderly. Herpes zoster can also lead to both acute and chronic pain syndromes. The patient with zoster infection of geniculate ganglion usually has vesicular eruption in the distribution of nerve. The onset of pain is followed within a few days by the appearance of grouped vesicles and spontaneously disappears as the disease resolves. When an ipsilateral facial palsy accompanies the painful eruption, this disorder is known as the Ramsey–Hunt syndrome. In these cases, high dose of 100 mg prednisolone daily for one week may be used for the treatment of facial palsy. The main differential diagnosis criteria of this syndrome is the pain, which is constant and burning and can be readily discriminated from the intermittent stabbing pain of n. intermedius neuralgia.¹ The initial feature of our case fit the Ramsey–Hunt syndrome. In a few days after the eruption and the facial palsy recovered, n. intermedius neuralgia symptoms were apparent.

Similar to trigeminal neuralgia, the genesis of n. intermedius neuralgia is a mystery. It is presumed that the etiology of n. intermedius neuralgia is analogous to that of trigeminal neuralgia. Calvin and colleagues² concluded that both peripheral and central mechanisms are required for the production of trigeminal neuralgia. Fromm and associates³ proposed that a peripheral nerve lesion (in the trigeminal root or distal) is the first event in a process that leads to central synaptic changes. The response of the central synapses to altered peripheral events leads to the development of the trigeminal neuralgia.¹

We suggest that edema of the facial in the bony channel, which could occur with zoster, might trigger this peripheral mechanism. The peripheral sensory distribution of the n. intermedius lies in areas also supplied by sensory fibers of cranial nerves V and X. This may be the reason why the patient was feeling dysesthesia and allodynia on the left mandibular region.

The management of n. intermedius neuralgia is similar to trigeminal neuralgia. In a medical approach, the main drug is carbamazepine. Many patients tolerate this drug poorly, predominantly because of side effects related to

the central nervous system. For patients who cannot tolerate carbamazepine, lamotrigine is a new option.

In conclusion, n. intermedius neuralgia, which is a very uncommon type of neuralgia, may follow zoster infection of geniculate ganglion. Because this syndrome is very similar to trigeminal neuralgia, the therapeutic approaches are the same.

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Venlafaxine for the Treatment of Neuropathic Pain

To the Editor:

The use of antidepressants in neuropathic pain syndromes is well-established.¹ Tricyclic antidepressants have been found to be superior to selective serotonin reuptake inhibitors.² However, side effects such sedation, hypotension, and urinary retention often limit the tolerability of these medications. It would be extremely useful to identify compounds that share the ability of the tricyclics to relieve neuropathic pain but are relatively free from the drug's many toxic effects. Tricyclic antidepressants are thought to relieve pain by blocking neuronal reuptake of serotonin and norepinephrine, potentiating these transmitters' inhibitory effects in nociceptive pathways.³ Antidepressant compounds without a tricyclic structure

but with these biochemical properties, such as mirtazapine, have proven to be effective in patients with chronic pain.⁴ Venlafaxine is a selective serotonin and norepinephrine reuptake inhibitor that has little anticholinergic activity and could, in theory, provide a useful alternative to tricyclic antidepressants for the treatment of neuropathic pain. We describe here a successful treatment with low doses of venlafaxine of a patient with neuropathic pain resistant to conventional analgesics.

A 32-year-old woman had undergone corrective surgery for scoliosis 10 years previously. She presented with one year of mid-back pain. The patient described the pain as paroxysms of the electrical shock or discharge type; she experienced this pain several times each day, and the phenomena of hyperalgesia and allodynia were experienced in the same area. Image studies (plain radiography and computerized tomography) revealed a root compression at the level of the dorsal fifth vertebra caused by the material used in the osteosynthesis.

During the year of worsening pain, a variety of treatments had been received: physiotherapy, acetaminophen, metamizol, and non-steroidal anti-inflammatory drugs. None controlled the pain satisfactorily. The case was therefore referred to the Pain Treatment Unit.

In the study conducted by the Unit, the patient reported a maximum level of pain of 80 out of 100 on the Visual Analogue Scale (VAS), in addition to the features of the pain previously described. The Hamilton scales for depression and anxiety did not provide any significant data.

On presentation, treatment consisted of piroxicam 20 mg/day. The clinical condition was diagnosed as a mixed nociceptive and neuropathic etiology, secondary to radicular irritation caused by osteosynthesis material. As the primary therapeutic measure, we administered venlafaxine 37.5 mg twice daily with the piroxicam. After 7 days of treatment, the patient reported considerable symptomatic relief, with a maximum level of pain of 35 on the VAS; also the electrical discharge-type paroxysms and the phenomena of hyperalgesia and allodynia had occurred on isolated occasions during the 7 days of treatment. At 2 months, the patient continued to report satisfactory symptomatic control of the pain, without any need to modify the initial dose, with good tolerance of medication, and without the anticholinergic side effects typical of the tricyclics.

Venlafaxine appears to have helped this patient's neuropathic pain independently of its antidepressive effects. In fact, the patient was free from any depression or anxiety as measured by the respective Hamilton scales. In a previous report, venlafaxine was effective in a case of low back pain associated with a severe depression.⁵ These cases are consistent with preclinical studies showing the efficacy of venlafaxine in rats with experimental mononeuropathy.⁶ Recently, a theoretical study demonstrated the similarities between venlafaxine and tramadol,⁷ an atypical analgesic that alleviates neuropathic pain.⁸ Like venlafaxine, tramadol is able to inhibit the reuptake of noradrenaline and serotonin, and, in addition, tramadol activates the mu-opioid receptor.⁹ In this context, it has been demonstrated that tramadol elicits antidepressant-like properties.¹⁰ Interestingly, the analgesic effect of venlafaxine in animals is blocked by naloxone, a mu-opioid antagonist.¹¹

Therefore, venlafaxine could be an alternative to classical tricyclic antidepressants for use in neuropathic pain, whether or not mood disorders are present. Its mechanisms of action in the alleviation of pain may be related to the monoaminergic and opioidergic systems.

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Criteria for Opioid Selection

To the Editor:

Despite the many advances made in the field of pain research and therapy, proper pain control is still hampered by many barriers. While much of the attention in recent years has focused on inadequate knowledge, poor assessment, concerns about the regulation of controlled substances, patient addiction, side effects, and analgesic tolerance,^{1,2} issues of cost, while omnipresent, have been the concern of very few clinicians.³⁻⁶

It has been reported that in the United States of America, 13 million or 45% of patients over the age of 65 have no drug insurance coverage.⁷ If asked, many patients, especially those on Medicare, state that they cannot afford to buy the analgesics prescribed by their physician. The opioids creating the most apparent economic drain are sustained-release preparations (Table 1).⁸ The several sustained-release preparations available offer the medical community sound alternatives to patients who develop bothersome side effects to morphine. However, when considering an alternative opioid, the issue of excessive cost should be included with other selection criteria.

Table 1
Criteria for Opioid Selection Table

Drug	Receptor Affinity				Pharmacokinetic Profile			Potency to oral morphine (ir)	Indicated Routes of Administration							Cost ^a for 30 days of 180 mg per day morphine or equianalgesic dose of another oral or TTS opioid
	μ	κ	δ	NMDA	Onset	Duration	PO		SL	SC	PR	IM	IV	TTS		
Morphine (ir)	√				20-30 m	3-6 h	-		√	√	√	√	√	√	\$68.40-126.90	
Morphine (sr)	√				2-4 h	8-12 h	-		√						\$116.16-172.91	
Fentanyl (transdermal)	√				12-24 h	48-72 h	70:1 (16)							√	\$331.40	
Hydromorphone (ir)	√				20-30 m	4-5 h	5:1 (17)		√	√	√	√	√	√	\$90.37	
Hydromorphone (sr)	√				2-4 h	8-24 h	5:1		√						not available in US	
Methadone	√	√	√		30 m	6-12 h	4:1 (< 90 mg) (18) 8:1 (91-299 mg) 12:1 (> 300 mg)		√	√	√	√	√	√	\$10.81	
oxycodone (ir)	?	?			20-30 m	3-4 h	1:1 (19)		√	√					\$198.83	
oxycodone (sr)	?	?			2-4 h	8-12 h	1:1		√						\$345.74	

^aSource: Matt Kauffman, PharmD, CGP, Clinical Pharmacy Specialist. Based on Ohio Medicaid Reimbursement, 1999. (Note: retail prices may vary and be higher.)

ir = immediate release; sr = sustained-release; PO = by mouth; SL = sublingual; SC = subcutaneous; PR = per rectum; IM = intramuscular; IV = intravenous; TTS = transdermal.