

# Versatis: medicated lidocaine plaster for postherpetic neuralgia

Steve Chaplin MSc, MRPharmS and Jayne Gallagher FRCA

## KEY POINTS

- Versatis is a medicated plaster containing lidocaine 5 per cent
- licensed for the treatment of neuropathic pain associated with previous herpes zoster infection (postherpetic neuralgia)
- available as lidocaine 5 per cent medicated plaster: 10, £24.13; 30, £72.40
- there is relatively weak evidence of efficacy and no comparative trials
- the plaster appears to be well tolerated and may therefore be considered for elderly patients and those with allodynia or a small area of pain



**Versatis, a topical lidocaine plaster, provides pain relief for postherpetic neuralgia. In our review, Steve Chaplin presents the clinical data relating to its efficacy and adverse effects, and Dr Jayne Gallagher comments on its role in therapy.**

Postherpetic neuralgia (PHN) is a chronic neuropathic pain arising as a complication of herpes zoster, defined as pain persisting for more than 30<sup>1</sup> or more than 120 days<sup>2</sup> after the resolution of the rash. Patients with PHN commonly describe pain as being constant and burning or intermittent with a lancinating or shooting quality; most patients also have mechanical allodynia.<sup>3</sup>

Risk factors for PHN include older age, being female, more severe acute rash and worse acute pain. In the UK, the lifetime prevalence of PHN is estimated at 0.7 per 1000 population and the incidence at 11 per 100 000 per year.<sup>4</sup>

A primary care study in Iceland found that PHN was common but, in younger adults, usually mild in severity.<sup>5</sup> In people aged 60-69, 20 per cent reported moderate pain after one month and 2 per cent after three months; severe pain was reported by 2 per cent after three months. In those aged 70 or older, 23 per cent reported moderate

pain and 3 per cent severe pain after one month; these figures declined to 5 and 1 per cent after three months and 2 per cent reported moderate pain after 12 months.

According to management guidelines,<sup>3</sup> the treatments of first choice are a tricyclic antidepressant, gabapentin or pregabalin (Lyrica); strong opioids are reserved for second-line use due to the risk of adverse effects. Topical lidocaine (Versatis) is well tolerated and may therefore be preferred for older patients, especially those with allodynia or a small area of pain.

Paracetamol alone or combined with full-dose codeine (30-60mg) may relieve mild to moderate pain; topical capsaicin (Axsain) is a further alternative.<sup>6</sup>

### The technology

Versatis is a medicated plaster containing lidocaine 5 per cent; it is licensed for the treatment of neuropathic pain associated with pre-

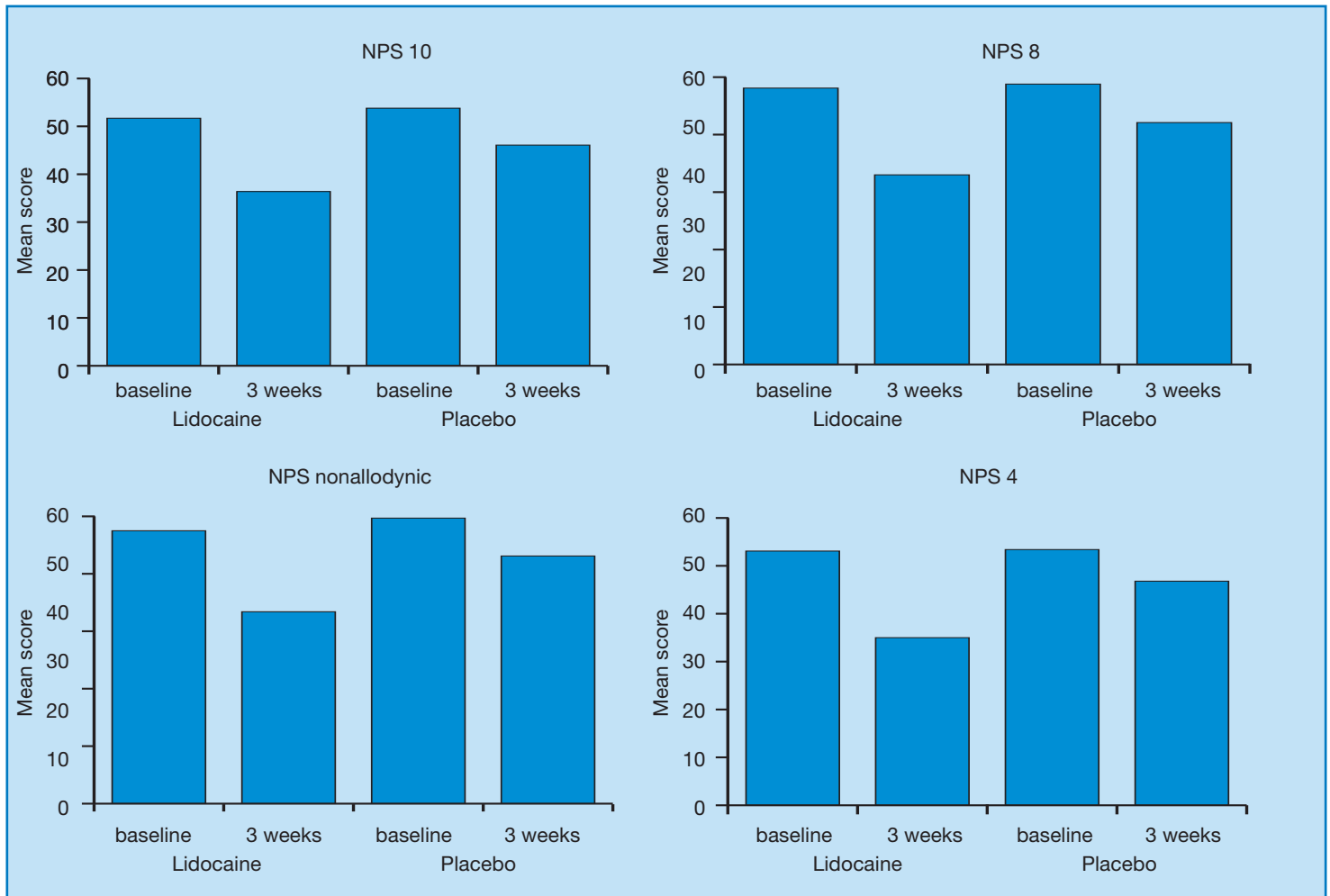
vious herpes zoster infection. The plaster must be used with caution in patients with severe cardiac, renal or hepatic impairment.<sup>7</sup>

The plaster should be applied to intact skin, so application is delayed until the rash has healed. Up to three plasters may be applied to the painful area once daily for up to 12 hours in a 24-hour period; the plaster may be cut if necessary. The maximum duration of application is 12 hours and this must be followed by a further treatment-free period of 12 hours. Treatment should be discontinued if there is no response within two to four weeks.

Mean maximum plasma concentrations of lidocaine during treatment have been reported as approximately 60-120ng per ml, approximately 10-20 times lower than the concentration achieved in the treatment of cardiac arrhythmias.<sup>7</sup>

### Clinical trials

No published trials have compared Versatis with alternative treatments.



**Figure 1.** Change, from baseline, in neuropathic pain scale (NPS) composite scores after three weeks' treatment with lidocaine and placebo; n=96,  $p < 0.05$  for all scores (NPS 10 = all 10 NPS descriptors; NPS 8 = all descriptors other than 'intensity' and 'unpleasant'; NPS 4 = descriptors 'sharp', 'hot', 'dull' and 'deep' pain; NPS nonallodynic = all descriptors other than those measuring allodynia/hyperalgesia)<sup>9</sup>

A randomised single-dose cross-over study involving 35 patients with PHN showed that, compared with a placebo patch, the lidocaine patch (up to three applied for 12 hours) significantly reduced mean pain scores from baseline from 4 to 12 hours after application.<sup>8</sup> Pain relief scores averaged over this period were also significantly greater with the lidocaine patch. All participants had allodynia but its severity did not correlate with efficacy.

In a *post-hoc* analysis of a second trial in which 150 patients with PHN were randomised to treatment with the lidocaine patch or

placebo patch, a subgroup of 96 (selected because end-point data were available) underwent further analysis to determine the effects of treatment on four composite measures from the neuropathic pain scale (NPS), a pain scale completed by patients.<sup>9</sup> After three weeks, the mean changes from baseline were significantly greater with the lidocaine patch for all composite NPS end-points (see Figure 1). The authors concluded that the patch improved all qualities of neuropathic pain.

Two further studies recruited patients who had already been shown to experience pain relief

with the lidocaine patch. In an eight-week nonblinded study<sup>7</sup> (unpublished), 265 patients with PHN were treated with up to three lidocaine plasters; of these 50 per cent experienced pain relief and were randomised to continue treatment or switch to a placebo patch for 2-14 days. The proportion of patients who stopped treatment after deriving no analgesia for two consecutive days was 25 per cent with lidocaine and 46 per cent with placebo.

In a second study of similar design involving 64 patients treated for 14 days,<sup>10</sup> the median time to stopping treatment was >14 days

with lidocaine and 3.8 days with placebo.

### Adverse effects

The lidocaine patch is well tolerated. According to the summary of product characteristics, 16 per cent of patients experience an adverse reaction and fewer than 5 per cent lead to discontinuation. The commonest reactions are application-site reactions of mild to moderate severity. The risk of systemic effects with lidocaine is 'very low'.

### Summary

Versatis is a medicated plaster containing lidocaine 5 per cent for relieving pain due to PHN. It relieves pain compared with placebo and has been shown to be effective for up to three weeks. It is well tolerated and on that basis may be considered as one option for selected patients with PHN.

## Place in therapy

Patients with PHN give a typical history of neuropathic pain and on examination they frequently have allodynia (defined as pain in response to an innocuous stimulus such as stroking). Current management guidelines suggest that drugs used in the management of neuropathic pain, such as the tricyclic antidepressants or anticonvulsants, are first line. However, patients frequently also use more conventional analgesics such as paracetamol and codeine. Opioids are regarded as third-line treatment.

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By Steve Chaplin, a pharmacist who specialises in writing on therapeutics

Like all neuropathic pain conditions, treatment is far from perfect with many patients responding poorly, experiencing intolerable side-effects to their medication, or both.

Versatis is a new option in the treatment of PHN. Several well-conducted studies have shown it to produce pain relief superior to placebo. However the pain relief was generally moderate and there are no head-to-head studies comparing it to other active treatments.

The patients who respond usually do so by 14 days, and if there is no response they should be discontinued at four weeks. It is

important therefore, that early reassessment of the patient takes place. There is no significant systemic effect as plasma levels of lidocaine are negligible.

In summary, Versatis may be a useful treatment for PHN. It may be as effective as other treatments for neuropathic pain, which is often difficult to treat. Its superior side-effect profile may make it particularly useful in older patients who are particularly prone to this distressing condition.

By Dr Gallagher, a pain management specialist at St Bartholomew's Hospital, London



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