

# North of Tyne Area Prescribing Committee

## Lidocaine Patches – Information for Primary Care

### Updated November 2013

This guidance has been prepared and approved for use in Newcastle, North Tyneside and Northumberland. It gives details of the responsibilities of GPs and specialist services in shared care arrangements and is intended to provide sufficient information to enable GPs to prescribe this treatment within the shared care arrangement. Secondary care will provide the initial three months of treatment, as agreed in the commissioning contract.

Further copies are available from:

NECS Medicines Optimisation Pharmacists	NECS Medicines Optimisation Team	T 01912172756
Medicines Management Unit, Freeman Hospital, Newcastle upon Tyne	Newcastle Upon Tyne Hospitals NHS Trust	T 0191 2231386

An electronic version of this document can also be viewed / downloaded from the North of Tyne Area Prescribing Committee's Website

<http://www.northoftyneapc.nhs.uk>

Approved on behalf of the	Name	Signature	Date
North of Tyne Medicines Guidelines and Use Group	Dr M Wright		6/11/13
North of Tyne Area Prescribing Committee	D. Campbell	<i>D. Campbell</i>	
Newcastle North and East CCG, Newcastle West CCG, Gateshead CCG, North Tyneside CCG, Northumberland CCG			

## North of Tyne Area Prescribing Committee Lidocaine Patches – Information for Primary Care.

### Background

Lidocaine patches are indicated and included in the North of Tyne formulary for the symptomatic relief of neuropathic pain associated with previous herpes zoster infection (post-herpetic neuralgia, PHN).

Lidocaine blocks sodium channels on nerve cell membranes inhibiting both the initiation and conduction of nerve impulses causing a local anaesthetic effect. While topically applied lidocaine is rapidly absorbed through mucous membranes it is poorly absorbed through the skin, but is effective when applied as a local anaesthetic under an occlusive dressing (which enhances absorption).

Clinical trials have demonstrated that lidocaine patches are more effective than placebo in post-herpetic neuralgia and appear to have similar efficacy to oral pregabalin. The cause of post-herpetic neuralgia is damage to peripheral neurons, dorsal root ganglia, and the dorsal horn of the spinal cord, secondary to herpes zoster infection (shingles). In postherpetic neuralgia, peripheral neurons discharge spontaneously and have lowered activation thresholds. As a result they exhibit an exaggerated response to stimuli. Topical lidocaine dampens peripheral nociceptor sensitisation and central nervous system hyperexcitability, and may benefit these patients.

**Treatment with Lidocaine patches should be initiated on the advice of pain specialists only and subject to an appropriate trial of efficacy in each patient.**

### Recommendations on Use

In the UK lidocaine is marketed as medicated plasters (Versatis) that cover an area of 10cm x 14cm, containing lidocaine 5% (700mg) in an aqueous adhesive base. It is recommended that the plasters are applied for no longer than 12 hours each day and that treatment is reviewed after 2-4 weeks. Maximum pain relief occurs about 4 hours after application of each plaster and up to 4 plasters can be applied at a time.

### Cautions

Caution should be taken if the patient has severe liver disease, severe heart problems, or severe kidney problems.

Lidocaine patches should not be used on or near the eyes or mouth. They have not been studied in patients under 18 years of age, hence are not recommended for use in this patient population.

### Contra-indications

The plaster is contraindicated in patients with known hypersensitivity to other local anaesthetics of the amide type e.g. bupivacaine, etidocaine, mepivacaine and prilocaine. It must not be applied to inflamed or injured skin, such as active herpes zoster lesions, atopic dermatitis or wounds.

## Dose

The painful area should be covered with the plaster once daily for up to 12 hours within a 24 hours period. Only the number of plasters that are needed for an effective treatment should be used. When needed, the plasters may be cut into smaller sizes with scissors prior to removal of the release liner. In total, not more than three plasters should be used at the same time.

The plaster must be applied to intact, dry, non-irritated skin.

If the patient has more pain at night than during the day, they should apply the plaster at around 7pm in the evening and remove it at around 7am in the morning.

If they have more pain during the day than at night they should apply the patch at 7am in the morning, and remove it at 7pm in the evening.

Hairs in the affected area must be cut off with a pair of scissors (not shaved).

## Monitoring

Treatment outcome should be re-evaluated after 2-4 weeks. If there has been no response to lidocaine patches after this period, or if any relieving effect can solely be related to the skin protective properties of the plaster, treatment must be discontinued. Treatment should be reassessed at regular intervals to decide whether the number of plasters needed to cover the painful area can be reduced, or if the plaster-free period can be extended.

## Side-effects

Body system	Adverse drug reaction	
Skin and subcutaneous tissues disorders	Skin lesion	uncommon
Injury, poisoning and procedural complications	Skin injury	uncommon
General disorders and administration site conditions	Administration site reactions	Very common

The following reactions have been observed in patients receiving the plaster under post-marketing conditions:

Body system	Adverse drug reaction	
Injury, poisoning and procedural complications	Open wound	Very rare
Immune system disorders	Anaphylactic reaction	Very rare

## Drug Interactions

No interaction studies have been performed. No clinically relevant interactions have been observed in clinical studies with the plaster. Since the maximum lidocaine plasma concentrations observed in clinical trials with the plaster were low, a clinically relevant pharmacokinetic interaction is unlikely.

Although usually the absorption of lidocaine from the skin is low, the plaster must be used with caution in patients receiving Class I antiarrhythmic medicinal products (e.g. tocainide, mexiletine) and other local anaesthetics since the risk of additive systemic effects cannot be excluded.

**NHS Cost**

The cost of using lidocaine patches is moderately high.

Drug	Dose regimen ( / day)	Cost per 30 days(£)
<b>Lidocaine 5% plaster</b>	<b>One to three plasters</b>	<b>£72.40 to £217.20</b>

**Other information**

Do not refrigerate or freeze.

After the sachet is opened, the plasters should be used within 14 days.

After use the plaster still contains active substance, therefore used plasters should be folded in half, adhesive side inwards so that the self-adhesive layer is not exposed, and the plaster should be discarded.

See the manufacturer's SPC or BNF for more detailed prescribing information