

TRENT MEDICINES INFORMATION SERVICE



# **BUPRENORPHINE PATCHES** – a high price for convenience?

### WHAT IS THE PROBLEM?

Buprenorphine is a strong opioid similar to morphine. Although it has both opioid agonist and antagonist properties this makes little difference to its clinical use. It is generally used like other opioids in chronic pain.

Buprenorphine patches cost several times more than oral morphine in equivalent doses. In the last year (to Sept 2021), Barnsley spent £416,000 on buprenorphine patches. 60% of this cost was as a result of prescribing the weaker strength of patches (Sevodyne<sup>®</sup>), which has a similar analgesic effect as co-codamol or tramadol.

## MAJOR CONSIDERATIONS

- Patches containing buprenorphine (e.g. Sevodyne<sup>®</sup>, Bupeaze<sup>®</sup>) are an alternative to oral opioid analgesics. The two brands are not interchangeable as they deliver different amounts of buprenorphine (Sevodyne<sup>®</sup> is the weaker) and the time each patch is applied is different weekly for Sevodyne<sup>®</sup> and twice weekly for Bupeaze<sup>®</sup>.
- The patches are not suitable for titrating the dose upwards in acute or unstable pain due to a delay in achieving higher blood levels. It may take up to 72 hours after a dose change for blood levels to reach a new stable level. After removal of a patch, a reservoir of active drug may remain in the skin and continue to be absorbed for several days and can cause difficulties in switching to alternative analgesics.
- A number of problems with the use of opioid patches have been raised locally. There have been a number of incidents where patients have forgotton to remove one patch before applying the next one increasing the risk of adverse events; skin irritation is a common problem with buprenorphine patches.
- A review of trials involving lower dose buprenorphine patches for chronic non cancer pain found that efficacy was similar to tramadol or co-codamol and that the patches have a considerable placebo effect.<sup>1</sup> Data on equivalent doses for these agents are lacking.
- Local prescribing guidelines advise the use of oral morphine as first line choice strong opioid. See Opioid Comparison Document at:

https://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/opioidcomparison

#### References: 1. MTRAC review here

2.. Guidance on the use of strong opioids in Barnsley. Barnsley NHS. April 2022. Available at: https://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/opioid-comparison

### WHAT ARE THE COSTS? (30 days, MIMS June 2021)

Comparison of cost of buprenorphine patches at each dose with approximate equivalent dose of Zomorph<sup>®</sup>. NB Patients should be monitored closely if any changes in dose or formulation are made

Sevodyne® patch 5mcg/hr or equivalent		£3.47 £5.93		Mor	phine (as Z	(omorph)	1	
Sevodyne® patch 10mcg/hr or equivalent	£3.4	7 £10.64				renorphine	• •	
Sevodyne® patch 15mcg/hr or equivalent	£6	.94 £15.51						
Sevodyne® patch 20mcg/hr or equivalent	E6	.94 £19.38						
Bupeaze® patch 35mcg/hr or equivalent		£11.77 £23.	68					
Bupeaze® patch 52.5mcg/hr or equivalent		£16.20	£34.98					
Bupeaze® 70mcg/hr or equivalent		£23.14 £44.98						
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ł	£0	£20	£40	£60	£80	£100	£120	£140

#### Dose equivalents of oral morphine and buprenorphine patches

NB These doses are a guide only. They are based on a ratio of 100:1 potency, though this may not be applicable to all patients. This data should not be used to switch treatments.

	Buprenorphine 5 micrograms/hr	12mg morphine in 24 hours					
	Buprenorphine 10 micrograms/hr	24 mg morphine in 24 hours					
	Buprenorphine 20 micrograms/hr	48 mg morphine in 24 hours					
	Buprenorphine 35 micrograms/hr	84 mg morphine in 24 hours					
	Buprenorphine 52.5 micrograms/hr	125 mg morphine in 24 hours					
	Buprenorphine 70 micrograms/hr	168 mg morphine in 24 hours					

### **KEY MESSAGES**

- Buprenorphine patches at lower doses are broadly as effective as codeine or tramadol but much more expensive. Oral analgesics should generally be preferred as first line therapy in chronic non-cancer pain.
- The patches are unsuitable for acute or unstable pain due to the need for slow titration of doses; it may take up to 72 hours to achieve a stable blood level after a change in dose.
- Exposure of patches to heat while being worn may lead to increased absorption of the drug and consequent adverse effects. Patients should be warned of the symptoms of excessive absorption.