

QIPP Detail Aid

Providing support for quality in prescribing

FENTANYL PATCHES – ANY BETTER THAN MORPHINE?

WHAT IS THE PROBLEM?

Fentanyl is a strong opioid similar to morphine, though it is much more potent. Patches containing fentanyl cost much more than oral morphine.

In the last year (to Feb 2012), the East Midlands spent over £4.4m on fentanyl patches at an average cost per item of over £48.

If half of this had been prescribed as morphine slow release (eg Zomorph[®]), over £1 million would have been available for other treatments.

MAJOR CONSIDERATIONS

- Patches containing fentanyl (Durogesic[®], Matrifen[®], Tilofyl[®]) are a useful way of delivering the drug that avoids the need for tablets. They are appropriate for use in stable pain for patients who are intolerant of morphine or who have renal failure.
- The patches are not suitable for titrating the dose upwards in acute or unstable pain due to the delay in achieving higher blood levels: it may take up to 36-48 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 as long as 22 hours (average 17). This can cause difficulties in switching to alternative analgesics.
- Increased absorption from patches may occur with raised temperatures such as occur in pyrexia or during a hot bath. Fatalities have occurred as a result.¹
- Prescribers may be unaware of the large amounts of opioid these patches can deliver (see morphine equivalent doses below).

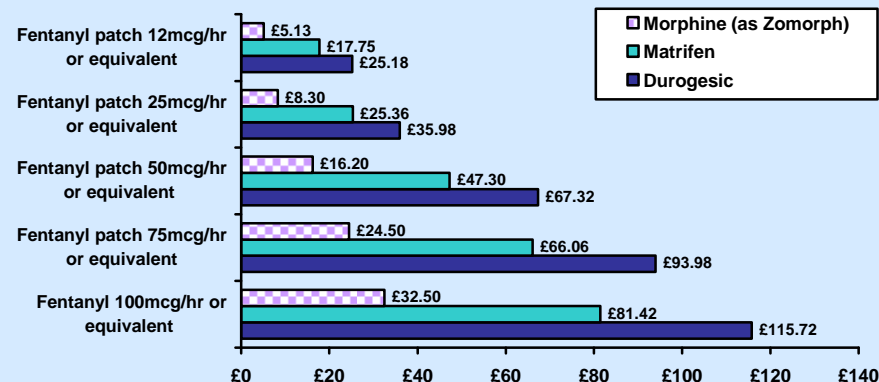
Approximate dose equivalents of oral morphine and fentanyl patches

NB These doses are a guide only. They are based on a ratio of 100:1 potency, though this varies widely in studies. This data should not be used to switch treatments.

Fentanyl 25 micrograms/hr	60mg morphine in 24 hours
Fentanyl 50 micrograms/hr	120 mg morphine in 24 hours
Fentanyl 100micrograms/hr	240mg morphine in 24 hours

Sources vary in the ratio of potency of these two drugs - for further information see ref 2:

WHAT ARE THE COSTS? (30 days, MIMS July 2012)



Comparison of cost of fentanyl patches at each dose with approximate equivalent dose of Zomorph[®]. Note that Durogesic[®] is much more expensive than Matrifen[®]. NB Patients should be monitored closely if any changes in dose or formulation are made.

KEY MESSAGES

- Fentanyl patches are a relatively potent formulation of opioid that are unsuitable in acute or unstable pain due to the need for slow titration of doses.
- Absorption from patches may change. Adverse events have occurred where the patches have been subjected to external heat, some of these have been fatal.
- Adverse events such as respiratory depression are a risk, particularly in those with pre-existing respiratory disease or who are opioid-naïve. The MHRA advice is not to use these unless other opioids have previously been tolerated.

References: 1. MHRA UK: Drug Safety Update Vol2 issue 2, 2008 at <http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON087796>

2. <http://www.nelm.nhs.uk/en/NeLM-Area/Evidence/Medicines-Q--A/How-should-conversion-from-oral-morphine-to-fentanyl-patches-be-carried-out/?query=fentanyl&rank=100>