

Formulary Advice: Fentanyl patches

Fentanyl patches are licensed for chronic intractable pain. Fentanyl patches may be considered as an alternative to morphine in specific circumstances, noting that morphine is the first choice strong opioid for patients at the third stage of the WHO ladder.

Ensure patients have thoroughly tried all previous options on the analgesic ladder prior to initiation on any strong opioid. Fentanyl patches **should only be considered if:**

- The oral route is unacceptable e.g. nil by mouth, gastrointestinal upset.
- Morphine / diamorphine cannot be tolerated due to side effects e.g. constipation, drowsiness, confusion, signs of opioid toxicity.
- Patients with renal impairment – consider use at eGFR<40, titrate and dose cautiously – seek specialist advice if unsure.

Fentanyl patches should be used in patients with intractable non-cancer pain only after all established therapies have been tried.

Dose conversion to fentanyl from other opioids should be informed by an appropriate conversion chart eg health community syringe driver prescription (see overleaf), Joint Formulary, Summary of Product Characteristics.

Cornwall & IoS health community Specialist Palliative Care advice line: 01736 757707

Useful facts prior to prescribing

- The patch formulation should be used very selectively; it is relatively expensive, and significant drug errors are common.
- The oral morphine equivalent to the 25mcg/hr patch is in the range 60 to 120mg/day. Hence fentanyl patches must be used very carefully in patients who are opioid naïve. A 12mcg/hr patch is available for sensitive patients and incremental dose increases. Ideally titrate to stable dose on an oral opioid before starting fentanyl
- Fentanyl patches are **not suitable** for patients with **unstable pain**.
- Fentanyl is less likely to cause toxicity in renal failure than morphine.
- It takes 6 to 12 hours for the patch to begin to work and will take 36 to 48 hours to reach stable plasma levels – therefore pain control may be erratic – continue to use breakthrough doses as required.
- The patch dose can be titrated up in increments after 72 hours if pain is uncontrolled.
- Because time to stable dose is long, do not increase dose more than every 48-72 hours

Useful facts when reviewing patients on fentanyl

- Consider need for specialist advice – eg Palliative Care, Pain Team.
- There is no ceiling to fentanyl patch dose: multiple patches can be used together. However consider seeking specialist advice if repeated dose increases are needed particularly if the improvement in function brought about by lower doses has been small or none.
- There is increased absorption from the patch with pyrexia.
- A small proportion of patients metabolise fentanyl faster and may need to change the patch every 48 hours.
- Prolonged use of opiates might lead to a state of abnormal pain sensitivity (opioid-induced hyperalgesia) resulting in patients presenting with increased pain. Such hyperalgesia-associated pain is more diffuse than the pre-existing pain and less defined in quality. Opioid dose reduction or change to an alternative opioid should be considered.
- In cancer pain, assessment by the Palliative Care Team is advised before commencing fentanyl lozenges or buccal tablets. It is normal practice to use oral opioids such as Oramorph for breakthrough pain; it is not necessary to use a different fentanyl product unless there are specific reasons for doing so.
- After the patch is removed, a reservoir of the drug remains under the skin, and it continues to be released for approximately 17 hours (range 13 to 22 hours). For the first 12 to 24 hours breakthrough medication only should be prescribed, then a long acting alternative can be prescribed. Observe for signs of opioid toxicity during this period.

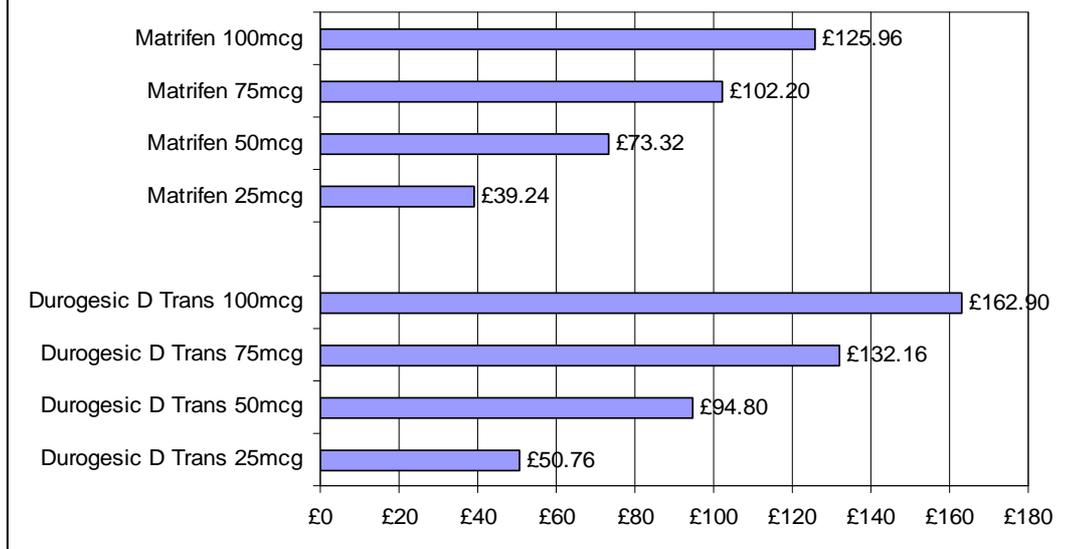
MATRIFEN (TEVA) IS THE PREFERRED BRAND OF FENTANYL PATCH AND SHOULD BE PRESCRIBED BY BRAND

A GUIDE TO EQUIVALENT DOSES FOR OPIOID DRUGS

N.B. – this is to be used as a guide rather than a set of definitive equivalences. Most data on doses is based on single dose studies so is not necessarily applicable in chronic use, also individual patients may metabolise different drugs at varying rates. The advice is always to calculate doses using morphine as standard and to adjust them to suit the patient and the situation. Some of these doses have by necessity been rounded up or down to fit in with the preparations available.

Oral Morphine			Subcutaneous Morphine		Subcutaneous Diamorphine		Oral Oxycodone			Subcutaneous Oxycodone		Fentanyl transdermal	Subcutaneous Alfentanil	
4 hr dose (mg)	12 hr SR dose (mg)	24 hr total dose (mg)	4 hr dose (mg)	24 hr total dose (mg)	4 hr dose (mg)	24 hr total dose (mg)	4 hr dose (mg)	12 hr SR dose (mg)	24 hr total dose (mg)	4 hr dose (mg)	24 hr total dose (mg)	Patch strength (micrograms)	4 hr dose (mg)	24 hr total dose (mg)
5	15	30	2.5	15	1.25	10	2.5	7.5	15	1.25	7.5	25mcg	0.125	1
10	30	60	5	30	2.5-5	20	5	15	30	2.5	15	25mcg	0.25	1.5
15	45	90	7.5	45	5	30	7.5	25	50	3.75	25	25mcg	0.5	3
20	60	120	10	60	7.5	40	10	30	60	5	30	50mcg	0.75	4
30	90	180	15	90	10	60	15	45	90	7.5	45	50mcg	1	6
40	120	240	20	120	12.5	80	20	60	120	10	60	75mcg	1.25	8
50	150	300	25	150	15	100	25	75	150	12.5	75	75mcg	1.5	10
60	180	360	30	180	20	120	30	90	180	15	90	100mcg	2	12
70	210	420	35	210	25	140	35	105	210	17.5	100	125mcg	2.5	14
80	240	480	40	240	27.5	160	40	120	240	20	120	125mcg	2.5	16
90	270	540	45	270	30	180	45	135	270	max	135	150mcg	3	18
100	300	600	50	300	35	200	50	150	300	s/c	150	150mcg	3.5	20
110	330	660	55	330	37.5	220	55	165	330	vol	165	175mcg	3.75	22
120	360	720	60	360	40	240	60	180	360		180	200mcg	4	24

Approx. cost of 10 patches (about 1 month's worth). Both are matrix patches.



Costs as of July'10

References

British pain society's 'opioids for persistent pain- Good Practice' January 2010 http://www.britishpainsociety.org/pub_professional.htm
 Cornwall area joint formulary edition 6 & Plymouth area joint formulary edition 5
 'Palliative Care Drug Update' Dr Carolyn Campbell Palliative Care Consultant RCHT-Presented at WoC GP leads meeting March 2010
 July Drug Tariff & Wholesaler on-line price list