

Foot note 5.

Guidance Document approved for NHS Fife Board by Fife Area Drug and Therapeutics Committee
FIFE PALLIATIVE CARE GUIDELINES

Guidelines for the Use of Transdermal Fentanyl Patches

INDICATION FOR FENTANYL PATCHES

Morphine is the first choice strong opioid for patients at the third stage of the WHO ladder (see pain guidelines)

Fentanyl patches **should 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 – see pain control guidelines
- There are compliance issues – supervised patch changes will assist this.

Useful facts:

- Fentanyl is a strong opioid
- Fentanyl patches are **not suitable** for patients with **unstable pain**.
- It takes 6-12 hours for the patch to begin to work and will take 36 – 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.
- The oral morphine equivalent to the 25mcg/hr patch is in the range 30 – 120mg/day. Therefore fentanyl patches must be used very carefully in patients who are opioid naïve. A 12mcg/hr patch is now available for sensitive patients and incremental dose increases.
- There is no ceiling to fentanyl patch dose: multiple patches can be used together. To achieve good analgesia the patch strength should be titrated up.
- There are now two types of patch available – a reservoir patch where the drug is held in solution and a matrix patch where the drug is distributed evenly throughout a matrix. Although no evidence exists for differences in release profiles it would be prudent to ensure patients remained on the same type of patch unless problems e.g. with adhesion occur.

HOW TO START FENTANYL PATCHES

Determine the appropriate fentanyl patch strength using the conversion chart attached.

To convert from:

- *4 hourly pain medication* – apply patch and continue with the next three doses of regular analgesia, then discontinue.
- *12 hourly pain medication* – apply patch with last dose of controlled release opioid then discontinue.
- *Syringe driver* – apply patch and continue syringe driver for 6-12 hours, then discontinue.

*****Caution – look out for breakthrough pain and signs of toxicity*****

To apply:

- Apply to clean, hairless skin (not exposed to radiotherapy) and hold in place for 1 minute. A secondary adhesive dressing can be useful for some patients with adhesion problems.
- The patch works by creating a depot of drug under the skin.
- The patch should be replaced every 72 hours. Rotate sites.
- Avoid direct heat – and if the patient is pyrexial, observe for opioid toxicity.
- Fentanyl is often less constipating than morphine. Half the dose of laxative and retitrate.
- Prescribe strong opioid for breakthrough with either immediate release morphine sulphate / oxycodone or s.c. strong opioid

*****Ensure correct breakthrough dose of strong opioid is available at all times - (Chart overleaf)*****

ADVICE FOR END OF LIFE CARE / UNSTABLE PAIN FOR PATIENTS ALREADY USING FENTANYL PATCHES

If the patient is dying and/or pain control becomes unstable and additional analgesia is required, you can:

- Leave the patch on (continuing to replace every 72 hours) and add a continuous subcutaneous infusion (of diamorphine / morphine sulphate)
- Diamorphine / Morphine infusion should be based on previous breakthrough requirements.
- If breakthrough requirement is not known, give the equivalent of 2-3 breakthrough doses (representing a 30-50% dose increase) as subcutaneous infusion over 24 hours. (see chart attached).
- Revise the breakthrough dose to reflect both the patch and the additional regular opioid dose.

Example: Patient is prescribed a 100mcg/hr fentanyl patch and has received three breakthrough doses of s/c diamorphine 20mg over the previous 24 hours. The pain is now unstable. It would be advisable to:

1. *continue the patch at the same dose (continuing to replace every 72 hours)*
2. **Add** *a continuous infusion of diamorphine at a dose of 60mg over 24 hours.*
3. *Change the breakthrough dose to 30mg diamorphine subcutaneously .*

TO DISCONTINUE THE FENTANYL PATCH

Reasons : opioid toxicity, opioid switch, allergy, non adherence, patient choice, dose reduction

- 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 – 22 hours).
- For the first 12 – 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.

For any advice or for patients needing a syringe driver rather than fentanyl patches seek advice from the specialist palliative care team.

References:

- Donner B et al. Long term treatment of cancer pain with transdermal fentanyl. J Pain and Symptom Management 1998;15:168-175
- Ahmedzai S, Brooks D. Transdermal fentanyl versus sustained release oral morphine in cancer pain: preference, efficacy and quality of life. J Pain and Symptom Management 1997;13:254-261.
- Fine PG. Fentanyl in the treatment of cancer pain. Seminars in Oncology 1997;24(5):20-27.
- Electronic Medicines Compendium, Janssen – Cilag Ltd. Durogesic Dtrans Summary of Product Characteristics. Updated 5th October 2006.
<http://emc.medicines.org.uk/emc/assets/c/html/displaydoc.asp?documentid=17086>
- Twycross RG, Wilcock A, Charlesworth S, Dickman A. Palliative Care Formulary 2nd Edition. (2002),. Radcliffe Publishing

CONVERSION AND BREAKTHROUGH CHART

Note that the 25mcg/hr Fentanyl patch must be used with caution in patients who are opioid naïve.

The figures below are an approximation and the patient should always be reviewed for signs of toxicity and inadequate analgesia during a conversion.

When switching opioid consider whether the patient's pain is already controlled as to whether a higher dose is needed.

The ranges quoted are suggested doses of the alternative to use based on strengths of preparations available & should minimise the number of tablets / caps required

FENTANYL PATCH (micrograms / hour)	EQUIVALENT ORAL MORPHINE (mg in 24 hours)	EQUIVALENT S/C DIAMORPHINE (mg in 24 hours)	BREAKTHROUGH ORAL MORPHINE (mg)	BREAKTHROUGH ORAL OXYCODONE (mg)	BREAKTHROUGH S/C DIAMORPHINE (mg)
12	45 (40-60)	15	7.5 (5 - 10)	3.5 (2.5 - 5)	2.5
25	90 (80-100)	30	15 (10 - 20)	7.5 (5 - 10)	5
50	180	60	30	15	10
75	270 (240 - 300)	90	45 (40 - 50)	22.5 (20 - 25)	15
100	360	120	60 (50 - 60)	30	20
125	450 (440 - 460)	150	75 (60 - 80)	37.5 (30 - 40)	25
150	540 (520 - 580)	180	90 (80 - 100)	45 (40 - 50)	30
175	630 (580 - 640)	210	105 (100 - 120)	52.5 (50 - 60)	35

FOR ANY ADVICE OR INFORMATION REGARDING HOW BEST TO USE FENTANYL PATCHES OR MANAGE OPIOID SWITCHING CONTACT A MEMBER OF THE SPECIALIST PALLIATIVE CARE TEAM