

Fentanyl Patch

INDICATION FOR FENTANYL PATCHES

First line therapy for severe pain uncontrolled by weak opioids is morphine.

Fentanyl patches are useful if :

- The oral route is unacceptable e.g. nil by mouth, patient choice, gastrointestinal upset
- Morphine / diamorphine cannot be tolerated due to side effects e.g. constipation, drowsiness, confusion
- There are compliance issues—supervised patch change will assist this.

Useful facts :

- Fentanyl patches are not suitable in patients with unstable pain.
- Fentanyl is a **strong** opioid
- The **oral morphine equivalent** to the **smallest patch** (25mcg/hr) is in the **range of 30-130mg/day**. Therefore fentanyl patches must be used **very carefully** in patients who are opioid naïve.

INITIATION OF FENTANYL PATCH

Determine fentanyl patch size using **CONVERSION CHART** over.

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 sustained release opioid, then discontinue.
- *Syringe driver* - apply patch and continue syringe driver for 6-12 hours, then discontinue.

*****Caution is needed - look out for breakthrough pain and signs of overdose*****

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.
- 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.

*****ENSURE CORRECT BREAKTHROUGH DOSE OF STRONG OPIOID IS AVAILABLE AT ALL TIMES***
(SEE CHART OVERLEAF)**

Useful facts :

- 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 25mcg/hr increments **after 72 hours** if pain is uncontrolled.
- 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.

ADVICE FOR END OF LIFE CARE / UNSTABLE PAIN

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 (s/c) infusion (usually diamorphine)
- Diamorphine infusion should be based on previous breakthrough requirements.
- If breakthrough requirement not known, give equivalent of 2-3x breakthrough doses (represents a 30-50% dose increase) as subcutaneous infusion over 24hours (see chart overleaf).
- Revised breakthrough dose must then reflect **both** patch and alternative opioid doses.

For example : Patient A is prescribed a 100mcg/hr fentanyl patch and has received three breakthrough doses of s/c diamorphine 20mg over the previous 24 hours. 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. the new breakthrough dose should be 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.
If a syringe driver is to be started WAIT for at least 12 hours, then use a reduced dose for next 12 hours.

CONVERSION AND BREAKTHROUGH CHART

Note that the lowest dose Fentanyl patch must be used in caution in patients who are opioid naïve.

FENTANYL PATCH (micrograms/hr) *	EQUIVALENT ORAL MORPHINE (mg in 24 hours)	EQUIVALENT S/C DIAMORPHINE (mg in 24 hours)	BREAKTHROUGH ORAL MORPHINE (mg)	BREAKTHROUGH S/C DIAMORPHINE** (mg)
25	30 - 134	20 - 40	5 - 20	5
50	135 - 224	45 - 75	25 - 35	10
75	225 - 314	75 - 105	40 - 50	15
100	315 - 404	105 - 135	55 - 65	20
125	405 - 494	135 - 165	70 - 80	25
150	495 - 584	165 - 195	85 - 95	30
175	585 - 674	195 - 225	100 - 110	35

* 12 MICROGRAM/HR FENTANYL PATCH NOW AVAILABLE

** NOTE DIAMORPHINE BREAKTHROUGH DOSE = 1/5TH PATCH SIZE

For further advice contact local Palliative Care Team or look up the
“Facts About Fentanyl” web site, with learning package and conversion wheel.

<http://www.palliativecareglasgow.info/fentfacts>