Pan-Birmingham NHS
Cancer Network

Coversheet for Network Site Specific Group Agreed Documentation

This sheet is to accompany all documentation agreed by Pan Birmingham Cancer Network Site Specific Groups. This will assist the Network Governance Committee to endorse the documentation and request implementation.

Document Title	Guidance on the Prescribing and use of Transdermal Fentanyl Patches in the Dying Phase (adults).
Document Date	
Document Purpose	• Provide guidance to prescribers on when it is appropriate to initiate a patient on a fentanyl patch. • Provide equivalences of fentanyl patches to oral morphine. • To draw attention to the different brands of fentanyl patch available. • Recommend branded prescribing of fentanyl patches. • Provide specific guidance for managing pain in patients who enter the dying phase of their illness and already have a fentanyl patch in situ.
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References	See document
Consultation Process	See version history
Review Date	September 2013
Approval Signatures: Network Site Specific Group Clinical Chair	Diana Webb
Date Approved by Network Governance Committee	29 September 2010

Pan-Birmingham NHS
Cancer Network

Guidance on the Prescribing and use of Transdermal Fentanyl Patches in the Dying Phase (adults).

Including the following guidelines:

- **The use of fentanyl patches in the dying phase**
- **Prescribing and dispensing fentanyl patches**

Version history

Version	Date Issued	Summary of Action and Change
0.1	Sept 2009	Both guidelines circulated by SPAGG members to colleagues at base and comments received
0.2	March 2009	Documents taken to SPAGG
0.3	15.07.10	Two fentanyl guidelines merged. Reviewed by Diana Webb
0.4	20.08.10	For final consultation with SPAGG
0.5	29.09.10	Approved by SPAGG

Contents

1. Scope of the guideline

This guideline has been produced to support:

- The prescribing and dispensing of fentanyl patches.
- The management of patients who already have a fentanyl patch in situ, when entering the dying phase.

2. Guideline Background

This guideline has been produced to ensure safe, effective consistent use of fentanyl patches for adults with palliative care patients across the Pan-Birmingham Cancer Network.

Guideline Statements

3 All Patients

3.1 Morphine should remain the first choice when a patient reaches level 3 of the analgesic ladder. It provides flexibility in titration and it does not have a maximum dose.

3.2 Transdermal fentanyl is an alternative level 3 opioid which may be used in place of morphine for patients with **stable pain**.

3.3 **Fentanyl patches should ideally be prescribed by brand** (see below).

4 Patient Selection

4.1 Reasons to use fentanyl in place of morphine include;

- Poor compliance with, or unable to take, oral medication
- Unable to tolerate morphine e.g. renal failure
- Aversion to use of morphine – following appropriate reassurance

It should **not** be used in situations where **pain is acute, and rapid dose titration is required**.

5 Prescribing Fentanyl patches

5.1 Equivalences to oral morphine are shown in the Table 1 below. *(Please note these are approximations only, as a fentanyl patch encompasses a range of morphine doses, as described in West Midlands Palliative Care Physicians Guidelines)*

Table 1

Fentanyl patch – changed every 72 hours	Equivalent morphine sulphate oral / 24hours (approximate)	Morphine Sulphate oral 1/6 breakthrough dose
12 mcg/hour*	45mg	7.5mg
25 mcg/hour	90mg	15mg
50mcg/hour	180mg	30mg
75mcg/hour	270mg	45mg
100mcg/hour	360mg	60mg

*the 12mcg/hr patch is only licensed to be used for titration above 25mcg/hr. However, it is commonly used for initiation in palliative care.

5.2 Currently there are four brands of transdermal fentanyl preparations available in the UK.

Table 2

Brand	Drug	Delivery mechanism	Additional information
Durogesic	Fentanyl	Reservoir	Parallel import (not a UK product). No 12mcg/hr patch
Durogesic DTrans	Fentanyl	Matrix	12mcg/hr patch available
Matrifen	Fentanyl	Matirx	12mcg/hr patch available
Tilofyl	Fentanyl	Reservoir	Relaunched in 2007 with markings on patches – patches produced before this had no identifiable markings. No 12mcg/hr patch.

5.3 The Royal Pharmaceutical Society recommends that steps should be taken to prevent unintentional changes of the brand of strong opioid supplied to a patient. In order to do this **fentanyl patches should ideally be prescribed by brand.** In cases where a patient's brand cannot be continued the patient and carer should be informed as such, and advised to monitor for symptoms of the patient being under or over opiated.

5.4 Examples of prescription:

- Durogesic – ***Fentanyl reservoir patch (Durogesic)***, 25 micrograms per hour. Apply one every third day. Supply five (5) patches
- Durogesic DTrans – ***Fentanyl matrix patch (Durogesic DTrans),*** 25 micrograms per hour. Apply one every third day. Supply five (5) patches
- Matrifen Patches – ***Fentanyl matrix patch (Matrifen)*** 25 micrograms per hour. Apply one every third day. Supply five (5) patches
- Tilofyl Patches – ***Fentanyl reservoir patch (Tilofyl)***, 25 micrograms per hour. Apply one every third day. Supply five (5) patches

6 When patients using fentanyl patches enter the dying phase

6.1 When patients using fentanyl patches enter the dying phase the patch should not be routinely discontinued.

6.2 Additional analgesia can be administered by addition of syringe driver.

6.3 **See appendices 1 and 2 for full guidance and examples for managing patients during the dying phase**.

6.4 Regular monitoring and review of the patient is essential when following this guidance.

Monitoring of the Guideline

This guidance will be considered for audit by the Supportive Care and Palliative NSSG and reviewed in 3 years.

References

1 www.palliativedrugs.com. Accessed June 2009.
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4 Scottish Intercollegiate Network Guidelines. No. 106- Control of Pain in Adults with Cancer. November 2008.
Available at: www.sign.ac.uk/pdf/SIGN106.pdf
5 Mercadente S. et al. Episodic (breakthrough) pain. Consensus Conference of an Expert Working Group of the European Association of Palliative Care: Cancer 2002;94:832-839.
6 Davies A. Cancer- related breakthrough pain. Oxford. Oxford University Press, 2006: 1-11.
7 RPSGB practice guidance – PJ Vol 277 no 7427 p620 18th Nov
8 WMPCP (West Midlands Palliative Care Physicians) Guidelines for the use of drugs in symptom control 2007

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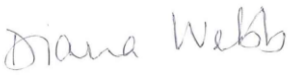
Signature:  Date: July 2010

APPENDIX 1

Guidance on Use of Fentanyl Patches in the Dying Phase

This guidance is intended for use in patients who **already** have a fentanyl patch in place when entering the dying phase, i.e. the final few days. In the final few days it is advisable to avoid discontinuing the fentanyl patch if time is too short to establish effective analgesia on a new regimen. The patient should always have regular pain assessments. If in doubt regarding pain management then seek advice from specialist palliative care.

The guidance describes the use of morphine and diamorphine **in addition to, or instead of** a fentanyl patch. If the patient is receiving alternative strong opioids e.g. oxycodone or alfentanil, or has contraindications to morphine/diamorphine (e.g. previous intolerance or renal failure) then seek advice from specialist palliative care.

Is the patient experiencing pain?

No

- Continue the current fentanyl patch
- Ensure that breakthrough analgesia is prescribed at an appropriate dose (see conversion tables at end of document).

Yes

- Give breakthrough analgesia at an appropriate dose (see conversion tables)
- If 2 or more doses of breakthrough analgesia are required over a 24 hour period or pain control is inadequate, ensure patient is reviewed in order to consider the **addition** of continuous analgesia via syringe driver.

Addition of a continuous subcutaneous infusion of analgesia via syringe driver when a fentanyl patch is in situ:

- Continue to prescribe and administer the fentanyl patch at the present dose and **ensure the continued use of fentanyl is documented.**
- To calculate the dose required for syringe driver review the breakthrough analgesia that has been needed in the past 24 hours (e.g. oral/SC morphine or SC diamorphine)
- Add these together and convert to an equivalent dose of morphine/diamorphine to be prescribed and administered via the syringe driver
- At this point review the dose of breakthrough analgesia, ensuring this dose is appropriate for the strength of fentanyl patch plus the syringe driver analgesia – see example 1

Example 1 – to calculate a new breakthrough dose when a patient is on a fentanyl patch and a morphine syringe driver

Fentanyl 25mcg/hour patch ≡ 7.5mg SC morphine for breakthrough pain
+
Morphine 30mg/24hour via syringe driver ≡ 5mg SC morphine for breakthrough pain

New dose for breakthrough pain = 7.5mg + 5mg = 12.5mg SC morphine

- Continue to monitor and review response to analgesics
- If on review after 24-48 hours, the patient remains distressed by pain or other symptoms it may be advisable to **discontinue** the fentanyl patch and provide total analgesia via the syringe driver. Seek specialist palliative care advice.

Discontinuing a fentanyl patch and converting to continuous infusion of analgesia via a syringe driver

1. Identify strength of fentanyl patch and calculate equivalent dose of SC morphine/diamorphine (see conversion tables 1 and 2 below)

2. **Divide this equivalent SC morphine/diamorphine dose by 2 (this is to allow for excretion of residual fentanyl)**

3. Add this identified dose of morphine/diamorphine to the amount already being administered via the syringe driver

4. Remember to also add the total of any breakthrough doses of morphine/diamorphine given in past 24 hours - see example 2

Example 2 – to convert from a fentanyl patch to morphine continuous infusions via a syringe driver

Patient receiving 25mcg/hour fentanyl patch + 30mg morphine via syringe driver and has also had 12.5mg x 4 bolus doses of SC morphine for breakthrough pain

To calculate "new" dose of morphine required via syringe driver
25mcg/hour patch ≡ 45mg morphine SC/24hours (divide by 2 = 22.5mg)
+
syringe driver = 30mg morphine SC/24hours
+
bolus doses = 50mg/24 hours

New syringe driver dose = 22.5mg + 30mg + 50mg = 102.5mg morphine SC/24 hours (round to 100mg)

5. Dose for breakthrough pain also needs to be reviewed at this point – in the example above it would be up to 1/6 of 24hour SC morphine i.e. 16.6mg SC PRN (round to 15 mg)

6. **STOP** prescription of fentanyl patch

7. **REMOVE** fentanyl patch when new syringe driver is commenced

8. Continue to give break-through analgesia PRN

9. Continue to review every 24 hours and adjust syringe driver dose according to breakthrough requirements.

10. **Please note** After 24 hours, most patients are likely to require an increase in the dose of subcutaneous opioid as the residual fentanyl will have reduced, and a general rule is to increase the dose to the full equivalent (see point 2 above). This may not be necessary, and the decision should be based on a pain assessment and break-through requirements

CONVERSION TABLES *(These are approximations only, as a fentanyl patch encompasses a range of morphine/diamorphine doses, as described in West Midlands Palliative Care Physicians Guidelines)*

Conversion Table 1

Fentanyl Patch and Morphine Sulphate Equivalence

Fentanyl patch dose	Morphine sulphate SC/24hours	Morphine sulphate SC 1/6 breakthrough dose	Morphine Sulphate oral 1/6 breakthrough dose
12 mcg/hour	22.5mg	3.75mg	7.5mg
25 mcg/hour	45mg	7.5mg	15mg
50mcg/hour	90mg	15mg	30mg
75mcg/hour	135mg	22.5mg	45mg
100mcg/hour	180mg	30mg	60mg

Conversion Table 2

Fentanyl Patch and Diamorphine Equivalence

Fentanyl patch dose	Diamorphine SC/24 hrs	Diamorphine SC 1/6 breakthrough dose
12mcg/hour	15mg	2.5mg
25mcg/hour	30mg	5mg
50mcg/hour	60mg	10mg
75mcg/hour	90mg	15mg
100mcg/hour	120mg	20mg

NB Conversions between opioids at <u>higher doses</u> may be unpredictable, and affected by a number of factors - advice from the Specialist Palliative Care Team can be sought, and close monitoring is advisable.

Appendix 2

GUIDELINES FOR THE USE OF FENTANYL/BUPRENORPHINE TRANSDERMAL ANALGESIC PATCHES IN THE DYING PHASE

This algorithm is intended for use in patients who enter the dying phase and have a transdermal patch in situ/require analgesia. If in doubt regarding pain management please contact specialist palliative care team for advice.

Is the patient already on Fentanyl /Buprenorphine Transdermal Patch?

YES

Patient in pain

YES

Leave Fentanyl/Buprenorphine patch in situ.

1. Calculate total additional analgesia required in previous 24hrs and **prescribe equivalent Morphine/Diamorphine via a syringe driver**. (Consider giving a further stat dose of "as required" analgesia as the effect of adding the syringe driver will not be immediate.)

   For patients receiving alternative strong opioids e.g Oxynorm or Alfentanil or those with contraindications to Morphine e.g. renal impairment or previous intolerance, please contact Specialist Palliative Care Team for advice.

2. Prescribe as required analgesia to include total background analgesia i.e 1/6th of total 24hr equivalent patch strength AND syringe driver.
   See example calculation below.

NO

NO

Transdermal Patches should not be commenced in the dying patient.

Refer to Morphine/Diamorphine

- Leave Fentanyl/Buprenorphine Patch in situ.
- Prescribe s/c PRN analgesia 1/6th of total 24hr equivalent patch strength – see conversion tables below.

REVIEW EVERY 24 HOURS AS PER PATHWAY, and remember to change the transdermal patch every 72hrs or as prescribed, and record it.

Approximate Opioid Dose Equivalences

Oral Morphine 30mg ≡ **s/c** Morphine 15mg

Fentanyl 25mcg/hr ≡ **Oral** Morphine 90mg/24hrs
Fentanyl 25mcg/hr ≡ **s/c** Morphine 45mg/24hrs

Buprenorphine(BuTrans) 5mcg/hr patch ≡ Oral Morphine 20mg/24hrs

Buprenorphine (Transtec) 35mcg/hr patch ≡ Oral Morphine 90mg/24hrs

To calculate new **breakthrough dose** when a patient is on a patch and morphine syringe driver

Calculate the appropriate breakthrough doses of morphine (1/6 of 24 hour equivalent) for the levels of fentanyl and morphine, then add them together, e.g.

Fentanyl 25mcg/hr patch: use 7.5mg sc morphine for breakthrough
PLUS
Morphine 30mg/24hrs via syringe driver : use 5mg sc for breakthrough

New dose for breakthrough pain = 7.5 **+** 5mg = 12.5mg sc Morphine