Risk of harm from the inappropriate use and disposal of fentanyl patches

For information: Medical, Nursing and Pharmacy Directors in independent hospitals.

Fentanyl patches are used in the management of malignant and non-malignant chronic intractable pain. Fentanyl is a potent opioid analgesic – a 25 microgram per hour fentanyl patch equates to daily doses of oral morphine of up to 90mg. As a consequence, fentanyl transdermal patches should only be used in patients who have previously tolerated opioids because of the risk of significant respiratory depression in opioid naive patients.\(^1\)

Regulatory authorities\(^1,2,3\) have received reports of life-threatening reactions and fatalities from fentanyl overdose occurring as a result of:

- inappropriate strength of fentanyl patches prescribed in opioid naive patients
- failure to remove an old patch before applying a new fentanyl patch
- exposure of the patch application site to a heat source (e.g. hot bath, hot water bottle, electric blanket, heating pad etc.) or increased body temperature (e.g. fever)
- inadvertent ingestion of fentanyl patches
- poorly affixed fentanyl patches transferring to another person
- children applying improperly disposed patches to their body believing the patches to be stickers or plasters

Incidents such as these have been known to occur across NHS Wales. Appropriate use and dosing of fentanyl patches and other opioid analgesics is a prominent feature in local and national guidance.\(^4\)

The Medicines and Healthcare products Regulatory Agency has issued guidance on the safe use and disposal of fentanyl patches.\(^1,2\)

Advice for healthcare professional is attached at annex 1.

Actions

Who: All hospitals and community services (general practices, pharmacists, nurses) where transdermal fentanyl patches are prescribed, dispensed or administered

When: As soon as possible but no later than 31 January 2016.

1. Identify if fentanyl patches are used in your organisation.
2. Circulate this alert to all medical, nursing, pharmacy and other staff.
3. Consider if immediate action needs to be taken locally to ensure the safe use and disposal of fentanyl patches and develop and action plan accordingly.
4. Ensure services are providing patients and/or their carers with information on the safe use and disposal of fentanyl patches (as set out in annex 1).\(^1\)

Share any learning from local investigations or locally developed good practice resources by emailing: ImprovingPatientSafety@Wales.GSI.Gov.UK
Annex 1

• Healthcare professionals, particularly those who prescribe and dispense fentanyl patches must fully inform patients, caregivers, residential and nursing home staff about directions for safe use and disposal including:
  • Follow the prescribed dose.
  • Follow the correct frequency of patch application.
  • Ensure old patches are removed before applying a new one.
  • Do not apply patches to broken skin. Do not shave the area before applying a patch.
  • Do not apply patches to the same area within a seven day period.
  • Never cut patches prior to application or use damaged patches.
  • Avoid touching the adhesive side of patches and wash hands after application.
  • Check the adhesion of patches, especially the edges. Regularly check, by sight or touch, that the patch is still adhered to the skin properly.
  • Do not expose patch application site to external heat e.g. hot bath, sauna, hot water bottle, electric blanket, heat pad or excessive sun exposure.
  • Seek medical advice if the patient develops a fever.
  • Fentanyl patches can cause drowsiness. If affected the patient should be advised not to drive or operate any tools or machinery. It is an offence to drive if their ability is impaired by the use of fentanyl patches.
  • Alcohol can potentiate the side-effects of fentanyl, increasing the risk of drowsiness.
  • Store patches securely and out of the sight and reach of children.
  • To dispose of the patch, the used patch should be folded as soon as it is removed so that the adhesive side of the patch sticks firmly to itself. The folded patch should be placed in the original outer pouch and discarded safely in the bin with your household waste or disposing in a yellow sharps container.
  • If a fentanyl patch is inadvertently transferred to another person, it should be removed immediately and medical help sought. If a patch is swallowed e.g. by a child, medical help should be sought immediately.
  • Patients should make all healthcare professionals aware that they use fentanyl patches so that any treatment given is safe and does not interact with fentanyl and if necessary patches are removed before procedures, scans etc.

Technical notes

Stakeholder engagement
The notice was developed in collaboration with the Medication Safety Officer network within Wales, All Wales Therapeutics and Toxicology Centre and Palliative Care Pharmacists Group in Wales.

References
4. NPSA. Rapid Response Report: Reducing dosing errors with opioid medicines. NPSA/2008/RRR05. www.nrls.npsa.nhs.uk/resources/type/alerts/?entryid45=59888&q =0%c2%acreducing+dosing+errors+with+opioid+medicines %c2%ac>[accessed 2nd March 2015]
• Patients should be advised to seek the advice of a community pharmacist when purchasing medicines for common ailments so that the pharmacist can recommend medicines that are safe to use with fentanyl patches.

• Trouble breathing, shallow breathing; tiredness or extreme sleepiness or sedation; inability to think, walk or talk normally; feeling faint, dizzy or confused, are signs and symptoms of fentanyl overdose.

• Concomitant use of CYP3A4 inhibitors (e.g. erythromycin, clarithromycin, verapamil, diltiazem, amiodarone, ritonavir, nelfinavir, ketoconazole, itraconazole, fluconazole etc.) may lead to potentially dangerous rises in serum fentanyl levels. Concomitant use of other CNS depressants (e.g. anxiolytics, hypnotics, antipsychotics, sedating antihistamines, skeletal muscle relaxants, other opioids etc) may also potentiate adverse effects from fentanyl.$^1$

• Patients who experience serious adverse events should have the patches removed immediately and should be monitored for up to 24 hours after patch removal.$^1$

• Further information for prescribers is available in the Summary of Product Characteristics and in the patient information leaflet for patients.