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# Safer Use of Transdermal Patches - Focus on Opioids

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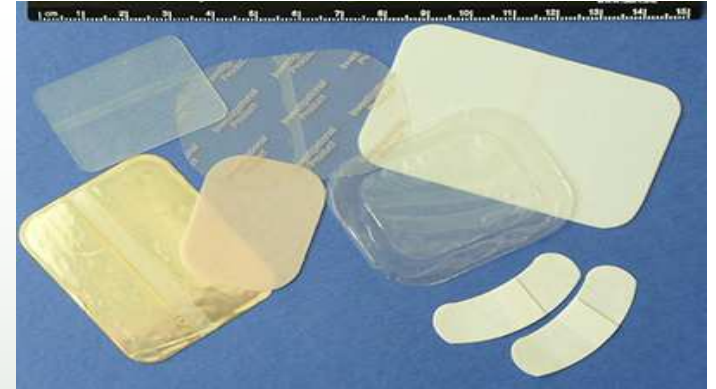
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# Presentation Outline

- Background
- Medication Safety Incidents
- Guidelines for Management
- Summary
- Questions

# Transdermal Patch



- A flexible, multi-laminated, pharmaceutical preparation
- Slowly deliver the drug substance (s)

## Advantages:

- Non invasive
- Reliable drug levels

# Disadvantages

- Safety incidents reported nationally and internationally
- Most dangerous incidents occur with **Opioid patches**
- **Fatalities have occurred**

## Did you know...??

Fentanyl is 50 - 80 times more potent than Morphine...

Opioid patches are named according to the number of micrograms of drug delivered per hour, e.g. Fentanyl '25' delivers 25 micrograms of Fentanyl per hour...

Patch wearers should not sit on radiators! Increased heat will dramatically increase the rate of drug delivery from patches...

# Clinical Indemnity Scheme Newsletter

CIS Newsletter, December 2008

## Strong Opioid Transdermal Patches - Safety Briefing

*Article by the Irish Medication Safety  
Network (IMSN)*

### Example 1 (Ireland<sup>1</sup>)

Older female patient experienced pain not responding to paracetamol. The GP prescribed fentanyl 50 microgram/hour patch (equivalent to 180mg morphine daily). 14 day hospital admission for toxicity.

### Example 2 (United States<sup>2</sup>)

A woman placed a fentanyl patch prescribed for her on her six-year old foster child's neck, thinking it would act locally. The child was unconscious the following morning and died soon after. The woman is being charged with criminal gross negligence.

### Example 3 (Canada<sup>3</sup>)

Patient with COPD and severe back and leg pain was commenced on a fentanyl 75 microgram/hour patch (equivalent to approximately 270mg oral morphine daily). The pain persisted and dose increased three days later to 125 microgram/hour patch (equivalent to approximately 450mg oral morphine daily). Pain improved following day, patient confused that evening, patient unresponsive next morning and died.

# Local incidents reported

Day 1: Fentanyl 37 microgram/hr prescribed but Transtec<sup>®</sup> (buprenorphine) 35 microgram/hr applied

Day 4: Fentanyl 25 microgram/hr + 12 microgram/hr applied but Transtec<sup>®</sup> (buprenorphine) not removed

Day 9: Patient drowsy, team noted 3 patches on patient

# When can incidents occur?

- Prescribing
- Application
- Documentation
  - Stopping/altering dose
- Removal and disposal
- Patient Education
- Invasive Clinical Procedures, e.g. MRI



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MMUH Guidelines: on the Management of Transdermal Patches: Effective date: May 2013  
Version 1

# Guidelines on the Management of Transdermal Patches

## Mater Misericordiae University Hospital



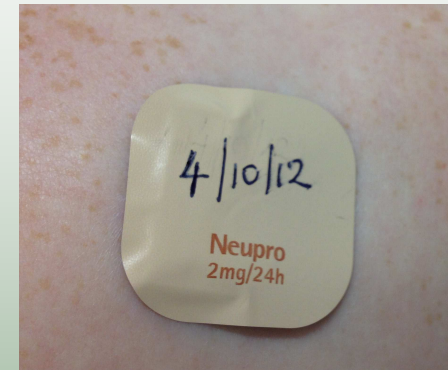
# Prescribing



- Use trade name, e.g. Butrans<sup>®</sup>
- Specify strength, frequency and day of application
- Tell the patient about the patch
- Use for chronic, stable pain only

# Application

- Name and date patch
- Apply to appropriate area
- Follow the dosing schedule
- **ALWAYS** remove old patch



# Documentation

**ALWAYS Document  
Application  
And  
Removal**



# Removal and disposal



- Remove once discontinued
  - Drug remains in reservoir
- Dispose of safely
  - Wear gloves, fold in half
- Be mindful of children



# Patient Education

- Highlight to patient:
  - Indication
  - Instructions
    - ‘Off with the old, On with the new’
  - Disposal
    - Keep away from children



# Summary

- Opioid patches:
  - Useful therapeutic option

BUT.....

**DANGEROUS** if not managed appropriately

- MMUH initiative will improve Patient Safety



# References

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# Questions

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