Minimising the Risks of Medication Errors with Buprenorphine Patches

A number of incidents and errors, resulting in patient harm, with buprenorphine patches, have been reported. A recent UKMi Q&As has highlighted ways of minimising these risks of medication errors which are summarised below. There are an increasing number of manufacturers, doses and duration of action of buprenorphine patches of both the lower and higher strength preparations. The licensed indications and frequency of application are shown below.

<table>
<thead>
<tr>
<th>Strength of Patch</th>
<th>Licensed Indication</th>
<th>Frequency of patch application</th>
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</thead>
<tbody>
<tr>
<td>Lower strength- 5, 10, 15 and 20 micrograms per hour</td>
<td>Treatment on non-malignant pain of moderate intensity when an opioid is necessary for obtaining adequate analgesia</td>
<td>Apply a new patch every 7 days</td>
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<tr>
<td>Higher strength- 35, 52.5 and 70 micrograms per hour</td>
<td>Treatment of moderate to severe cancer pain and severe pain which does not respond to non-opioid analgesics</td>
<td>Varies depending on the brand prescribed</td>
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Apply a new patch either every 3 or 4 days. SPCs suggest biweekly dosing e.g. Tuesday and Friday.

The dosing instructions in the relevant Summary of Product Characteristics should be followed. Resources which give comparative doses with other opioids are available in the BNF and www.paindata.org. It should now be possible to identify an alternative brand of buprenorphine patch with different adhesives for patients reporting skin reaction/sensitivity.

Discussions are currently underway in NHS Forth Valley on a preferred lower strength brand of buprenorphine patch on the grounds of cost.

Medication errors with buprenorphine patches can be minimised by:

- Being aware of the range of strengths and frequency of replacement of the various buprenorphine patches
- Being aware of the potential for confusion with other opioid patches
- Ensuring that doses are suitable for the individual patient in line with the SPC bearing in mind whether the patient is opioid naive or is being transferred from another opiate
- Prescriptions and dispensing labels should state the strength (dose rate) and frequency of patch replacement
- Advising the patient to remove the existing patch before replacing it at the appropriate interval. Patients may find it helpful to keep a record of when old patches are removed and new patches applied (e.g. Write day of changing on packaging, diary, calendar etc)
- Advising patients to avoid external heat sources and that fever might increase absorption
- Legally acceptable CD dosage instructions which must include the actual number of patches to be applied in addition to the frequency eg ONE patch to be applied.

Key Points of interest:

- Avoid generic Desogestrel products in those with allergy to peanuts or soya bean oil
- Prescribe devices that are not metered dose inhalers by BRAND
- 30ml urinary catheters should be advised by urology
- Levonorgestrel PGD for GP practices withdrawn
- Apremilast – risk of suicidal thoughts and behaviour
- Hyoscine butylbromide injection – risk of serious adverse effects in patients with underlying cardiac disease
Desogestrel in Peanut or Soya Allergy

It has come to light that some generic Desogestrel products contain soya bean oil and it is recommended that these products should not be taken by patients who are allergic to peanuts or soya. This applies to both single agent and combination oral contraceptives containing desogestrel.

Prescribing of Inhaler Devices

Over the years, generic prescribing has been encouraged to reduce drug costs. However, this is not always appropriate for inhaled drugs as often the generic description can describe more than one product or device. Such generic prescribing can leave the brand and inhaler device open to interpretation by the pharmacist which may lead to variability in the type of inhaler device the patient receives.

Prescribing of Urethral Balloon Catheters

30ml urethral balloon catheters should only be used in specific circumstances such as post prostate surgery. The usual balloon size for a urethral catheter in an adult is 10mls. The heavier weight of the larger 30ml balloon may cause bladder spasms and irritation of the bladder. Under-inflation of the balloon with a smaller volume of water will cause the balloon to be distorted leading to an incorrect catheter tip position, potentially giving the patient more irritation and spasm.

Prescribers should ensure that:

- Patients prescribed urethral 30ml balloon size catheter have had this recommended by urology
- All staff are aware of the need to choose the appropriate size of balloon when adding catheter items to a patient’s record on Emis

Levonorgestrel Patient Group Direction for GP Practices Withdrawn

The Patient Group Direction (PGD) for levonorgestrel for emergency contraception has been withdrawn due to lack of demand, as practices are now either writing prescriptions or referring patients to community pharmacies for supply under the community pharmacy PGD for levonorgestrel.

- Withdraw any copies of the levonorgestrel PGD for GP practices and archive
- Patients requiring emergency hormonal contraception with levonorgestrel can be referred to Community Pharmacies for supply under PGD
**GP Prescribing Initiatives**

Over the last few months GP practices have been working on three prescribing related initiatives. This article explains the work which has been happening.

**Whole System Working-Polypharmacy Work Stream**

The majority of preventable drug related admissions involves anti-platelets, diuretics, NSAIDs, anticoagulants, opioids, beta-blockers, ACE inhibitors, drugs used in the treatment of diabetes and steroids.

In order to reduce potential harm to patients, due to polypharmacy, practices have been undertaking polypharmacy reviews focusing on those most at risk to assess appropriateness of all prescribed medicines.

- increasing frailty
- adverse drug reactions, drug interactions
- approaching end of life

To assist with these reviews, local and national polypharmacy guidance was issued in 2016 which GP practices have been encouraged to use. As part of a polypharmacy review, prescribers may decide to provide the Scottish Patient Safety Programme Medicines Sick Day Rule Cards to appropriate patients.

<table>
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<tr>
<th>Sick Day Rule Cards advise patients to temporarily stop the following drugs during illness that can result in dehydration (vomiting, diarrhoea and fever):</th>
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<tr>
<td>• ACE I/ARBs, NSAIDs, diuretics, metformin</td>
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**Rational Prescribing Initiative (RPI)**

The RPI is to support the promotion and implementation of safe, cost effective prescribing across GP practices in Forth Valley. There are 3 components to the RPI and this will run until September 2017.

**Scriptswitch® (a prescribing decision support tool)**

- Practices to install and use Scriptswitch®
- Practice level Scriptswitch® reports to be discussed on a quarterly basis, agreeing an action plan.
- An internal practice meeting to discuss the impact of Scriptswitch to be carried out (by end March 2017).

**COPD - LAMA**

- Practice prescribing of Incruse® Ellipta® (umeclidinium) or Eklira® Genuair® (aclidinium) to account for 50% or over of all single agent LAMA inhaled devices.

**Step 2 opioids**

- Practice prescribing of Step 2 opioids (other than strong opioids) should be 29.82 DDDs/1000 patients/day or under, or a reduction of 4.2 DDDs/1000 patients/day.

**Repeat Prescribing Locally Enhanced Service**

The aim is to improve repeat prescribing systems and processes within GP Practices to minimise the waste of medicines and support review of the repeat prescribing processes. Practices will be:

- Implementing a local GP Practice Patient Medicines Awareness Campaign by:
  - Carrying out a patient survey
  - From the survey results the practice will decide on a local practice Medicines Awareness or Waste Campaign
- Carry out Level 1 medication review on an additional 5% of patients receiving regular repeat items (*this builds on the previous 2014/15 target of 5%*):
  - Using the Scottish Therapeutics Utility tool (STU) reports to help prioritise patients for Level 1 review
  - Produce a register of patients on MDS
**Drug Safety Updates**

Selected highlights from recent Drug Safety Update Bulletins from the MHRA (https://www.gov.uk/drug-safety-update)

Prescribers are encouraged to subscribe directly to the Drug Safety Updates Bulletin which is only available by email. www.gov.uk/government/organisations/medicines-and-healthcare-products-regulatory-agency/email-signup

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**Apremilast (Otezla▼): Risk of suicidal thoughts and behaviour**

Apremilast (Otezla▼) is used in the treatment of moderate to severe chronic plaque psoriasis or active psoriatic arthritis in adults who have not responded to other systemic treatments.

There is an increased risk that some patients may experience psychiatric symptoms with apremilast.

A recent review of the evidence from clinical trials and postmarketing cases of apremilast has shown a causal association with an event rate of suicidal thoughts and suicidal behaviour of between 1 in 1000 and 10 in 1000 patients taking apremilast.

See January 2017 Update for more information.

- Apremilast is associated with an increased risk of psychiatric symptoms, including depression, suicidal thoughts, and suicidal behaviours
- Suicidal thoughts and behaviour have been reported in patients with or without a history of depression
- Carefully assess the benefits and risk of starting and continuing apremilast in patients with a history of psychiatric symptoms.
- Stop treatment if new psychiatric symptoms appear or if existing symptoms get worse
- Advise patients to inform a healthcare professional if they notice changes in their mood
- Report suspected adverse reactions via the Yellow Card

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**Hyoscine butylbromide (Buscopan®) injection: risk of serious adverse effects in patients with underlying cardiac disease**

Hyoscine butylbromide (Buscopan®), when given intravenously or intramuscularly, is indicated in acute muscular spasm; or in radiological and diagnostic procedures where spasm may be a problem.

A few patients have died as a result of receiving hyoscine butylbromide injection and in most of these cases the adverse reaction was reported as acute myocardial infarction/cardiac arrest. See February 2017 Update for more information.

- Hyoscine butylbromide injection:
  - can cause serious adverse effects including tachycardia, hypotension, and anaphylaxis which can be fatal in patients with underlying cardiac disease
  - should be used with caution in patients with cardiac disease e.g. Heart failure, CHD, cardiac arrhythmia or hypertension
  - is contraindicated in patients with tachycardia
  - Patients given Hyoscine butylbromide injection should be monitored
  - Ensure resuscitation equipment is available

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**Contact Information:**

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<thead>
<tr>
<th>General Primary Care Prescribing Advice:</th>
<th>For Advice Related to Management of Controlled Drugs:</th>
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<tbody>
<tr>
<td>Contact your Primary Care Pharmacist; or alternatively</td>
<td>Kirsty Peacock, Inspection Officer for Controlled Drugs.</td>
</tr>
<tr>
<td>Primary Care Prescribing Support Team on 01324 673611</td>
<td>NHS Forth Valley, Forth Valley Royal Hospital Tel: 01324-566743</td>
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