Supporting prescribing excellence - informing colleagues in primary and secondary care

Lothian Prescribing Bulletin

Issue No. 68
July 2014

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Golden rules for safe prescribing in hospital

The aim of the NHS Lothian golden rules for prescription writing is to minimise patient harm by promoting safe prescribing of medicines and reducing the risk of medication errors.\(^1\) The complex task of prescribing is an essential role of foundation year 1 doctors yet lack of prescribing competence has been recognised.\(^2\) A recent local audit of approximately 2000 hospital prescriptions* based on the EQUIP\(^3\) study audit criteria and the 14 golden rules of prescribing\(^1\) suggested three quarters of errors were related to non-adherence to the golden rules. Learning points were highlighted in the audit and common errors are illustrated below.

### Common errors

<table>
<thead>
<tr>
<th>Unacceptable abbreviations</th>
<th>Potential risk</th>
<th>Acceptable term</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii</td>
<td>Mistaken for number 11</td>
<td>TWO</td>
</tr>
<tr>
<td>u, U</td>
<td>Letter u or U mistaken as numeral resulting in risk of overdose, e.g. 5u of insulin interpreted as 50</td>
<td>UNITS</td>
</tr>
<tr>
<td>iu, IU</td>
<td>Mistaken as IV</td>
<td>UNITS</td>
</tr>
<tr>
<td>mcg, µ</td>
<td>Mistaken as milligrams resulting in risk of overdose</td>
<td>micrograms</td>
</tr>
<tr>
<td>INH</td>
<td>Mistaken for another route IV, IM, ID</td>
<td>INHAL</td>
</tr>
</tbody>
</table>

Always sign and print name to allow prescriber identification. Initials are not acceptable.

Never prescribe as ORAL/IV as this leaves a decision on which route to administer and there is no way of identifying on the prescription chart by which route drug was administered.

For AS REQUIRED prescriptions:
- State minimum time interval between doses and the maximum daily dose to prevent potential overdose and adverse effects.
- State indication of symptoms to be relieved to guide appropriate use by nursing staff.

For antibiotic prescriptions it is important to document indication and treatment duration.

References:

* Unpublished work completed by Erin Winstead and Brittany Porter, University of Kentucky PharmD students under the supervision of Anne Kinnear, Lead Pharmacist, Medicine of Elderly, Royal Infirmary of Edinburgh.
**Tramadol (CD3) - new prescription requirements**

The Home Office recently announced changes to the legal classification of certain medicines including tramadol. From 10th June 2014, tramadol was changed from a Prescription Only Medicine (POM) to a Schedule 3 Controlled Drug (CD3). The main implications resulting from this change are listed in the table below:

<table>
<thead>
<tr>
<th>Prescription writing requirements</th>
<th>Tramadol prescriptions will now require to state:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Patient name and address</td>
</tr>
<tr>
<td></td>
<td>● Prescriber name and address</td>
</tr>
<tr>
<td></td>
<td>● Drug name, strength and form</td>
</tr>
<tr>
<td></td>
<td>● Total quantity in words and figures</td>
</tr>
<tr>
<td></td>
<td>● Dated and signed</td>
</tr>
<tr>
<td></td>
<td>● Dosage instructions*</td>
</tr>
<tr>
<td></td>
<td>● Installment quantities must be included if supplied in instalments, e.g. weekly</td>
</tr>
<tr>
<td></td>
<td>(* note ‘as directed’ is not acceptable but ‘one as directed’ is allowable)</td>
</tr>
<tr>
<td>Record keeping</td>
<td>Tramadol receipts and supplies DO NOT require to be kept in a CD register</td>
</tr>
<tr>
<td>Storage</td>
<td>Tramadol does NOT require to be kept in a CD cabinet</td>
</tr>
<tr>
<td>Validity of prescription</td>
<td>Tramadol scripts are valid for 28 days from the date the script is signed or the appropriate ‘start date’ if specified, whichever is later</td>
</tr>
</tbody>
</table>

A consensus document, supported by the Controlled Drug Accountable Officers Network (Scotland) Executive Group, provides guidance on some Frequently Asked Questions and additional information. This can be found at: [www.knowledge.scot.nhs.uk/accountableofficers/resources-library/resource-detail.aspx?id=4048217](http://www.knowledge.scot.nhs.uk/accountableofficers/resources-library/resource-detail.aspx?id=4048217)

Additionally, under these changes:
- Zopiclone and zaleplon will become Schedule 4 CDs bringing them in line with zolpidem, i.e. the same category as the benzodiazepines.
- Lisdexamfetamine will be classified as a Schedule 2 CD but as previous advice was to treat this as a schedule 2 CD there should be no change to current practice.

Later this year the exemption for prescription writing requirements previously granted to temazepam will be removed and additional information will be issued at that time.

*Thanks to Ms Judie Gajree, Lead Pharmacist, Controlled Drugs Governance Team, for contributing this article.*

**Risk of cardiac side-effects with domperidone**

The MHRA have issued updated guidance to highlight that domperidone is associated with a small increased risk of serious cardiac side-effects, and its use is now restricted to the relief of nausea and vomiting¹. Its use as a prokinetic is now unclear and there are currently no medicines licensed in the UK as prokinetic agents. LJF recommendations for all uses of domperidone in adults and children are currently under review.

<table>
<thead>
<tr>
<th>Key messages:</th>
</tr>
</thead>
<tbody>
<tr>
<td>◆ Domperidone should not be used by people who have serious underlying heart conditions, those receiving other medicines known to prolong QT interval or potent CYP3A4 inhibitors (see BNF Appendix 1) and those with severe hepatic impairment.</td>
</tr>
<tr>
<td>◆ It is restricted to use in the relief of symptoms of nausea and vomiting and at the lowest effective dose (adults - no more than three 10mg tablets per day) for the shortest possible duration (maximum one week).</td>
</tr>
<tr>
<td>◆ It will no longer be licensed to treat other conditions such as heartburn, bloating or relief of stomach discomfort.</td>
</tr>
</tbody>
</table>

Reference:
**LJF update - actinic keratoses**

Actinic keratoses are common pre-malignant keratotic lesions occurring on chronically sun-exposed adult skin, found predominantly on the backs of the hands and forearms, the face and ears, the scalp in balding men and the lower legs in women. They may also occur on the lips. They are usually harmless but there is a small risk of progression to squamous cell carcinoma (SCC).

As they are caused by excessive sun exposure over many years they are more common in older people. They also commonly occur in those with fair skin, blue eyes, red or blonde hair individuals, who burn easily in the sun but tan poorly, and those who have sunbathed, used sunbeds, and undertaken outdoor work or recreational activities.

Actinic keratoses can be variable in appearance, even differing from one another within a single individual. At first they can be subtle rough macules about a centimetre or two in diameter. Some are skin coloured, others are pink, red or brown. They can become raised, hard, warty and may even develop a small horny outgrowth. Often surrounding skin looks sun-damaged - blotchy, freckled and wrinkled. The appearance of an actinic keratosis is sufficient to enable the diagnosis to be made, and treatment started in primary care. Treatment starts with advice to protect the skin from further sun damage (for example, by wearing a hat, long sleeves and a sunscreen with high sun protection factor). Occasionally, small actinic keratoses may go away spontaneously, but generally they are actively treated as there is a small risk that some might transform into a skin cancer. See LJF recommendations, below.

In cases of diagnostic doubt, in the immunosuppressed or where a lesion is growing rapidly (especially if skin cancer is suspected), patients should be referred to dermatology where a local anaesthetic biopsy may be taken for microscopic examination.

**LJF section 13.8.1.1 Actinic keratosis** has been revised, with the key points as follows:

**First-line treatments:** diclofenac sodium 3% gel (Solaraze®) and fluorouracil 5% cream (Efudix®) remain unchanged.
- Diclofenac sodium 3% gel should be applied thinly twice daily for 60-90 days; max. 8g daily.
- Fluorouracil 5% cream should be applied thinly to the affected area once or twice daily; max area of skin treated at one time, 500cm²; usual duration of initial therapy, 3-4 weeks.

**Second-line treatment:** ingenol mebutate (Picato®) gel has been added.
- The 150micrograms/g strength is used once daily for three consecutive days to head and neck skin.
- The 500micrograms/g strength is used once daily for two days to trunk and limb skin.
- Warn patients to expect an inflammatory response of treated skin between days 4 and 14. Emollients can be used during the inflammation if required.
- The shorter treatment duration of ingenol mebutate may result in better patient adherence over first-line treatments with longer treatment courses.

**Prescribing note**
- fluorouracil 0.5% / salicylic acid 10% cutaneous solution (Actikerall®) has been added for thick hyperkeratotic actinic keratosis, as an alternative to first-line options where the addition of salicylic acid is deemed beneficial
  - Apply solution once daily for up to 12 weeks.
  - The solution should only come into contact with the actinic keratosis and a rim of max. 0.5cm of the healthy skin surrounding the lesion left to dry to form a film over the applied area.
  - Each time it is reapplied the existing film coating should be removed by peeling it off.
  - Warn patients to expect an inflammatory response of treated skin.

*Thanks to Dr Alex Holme, Consultant Dermatologist, for contributing this article.*

View the Lothian Joint Formulary at [www.jf.scot.nhs.uk](http://www.jf.scot.nhs.uk)
Let me introduce you to STU

The Scottish therapeutics utility (STU) is an IT solution to help improve general practice repeat prescribing. Working within the clinical systems InPS Vision and EMIS, STU can identify and target potential problems with a patient’s list of repeat medicines.

Repeat prescriptions account for 77% of all prescriptions issued. In NHS Lothian this involves around 36,000 repeat prescription items per working day. Forty-three per cent of people receive at least one repeat prescription and this amount increases to 75% for those over the age of 60 years. Despite this scale of clinical intervention there is currently limited scope within either InPS Vision or EMIS for practices to understand how well their repeat medication system is functioning. In both clinical systems the patient’s therapy screen provides some information on potential repeat medication issues, such as items that have not been issued recently, but this information may be overlooked by the user.

STU interrogates the practice’s repeat medication records to produce the following reports:

<table>
<thead>
<tr>
<th>Report</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dashboard</strong></td>
<td>Repeat and acute items issued, practice population and patients prescribed repeat items.</td>
</tr>
<tr>
<td><strong>Number of repeats</strong></td>
<td>Patients grouped by the number of active repeat items.</td>
</tr>
<tr>
<td><strong>Duplicate issues</strong></td>
<td>Repeat items that have been issued more than once in two days excluding re-prints.</td>
</tr>
<tr>
<td><strong>All repeats issued</strong></td>
<td>Patients who have had all repeats issued at the latest request.</td>
</tr>
<tr>
<td><strong>Repeats not issued</strong></td>
<td>Active repeat items that have not been issued in given time periods with BNF drill down.</td>
</tr>
<tr>
<td><strong>Priority Patient Groups</strong></td>
<td>Monitored Dosage System/Resident in a care home/Registered with Chronic Medication Service.</td>
</tr>
</tbody>
</table>

STU has a high degree of flexibility to meet the needs of clinical and non-clinical practice staff and primary care prescribing support teams to undertake a range of medicines management functions. Within the InPS Vision version, it is possible to open an individual patient’s clinical record from a number of the reports in order to correct obvious errors, such as item duplication, or to stimulate a level one, two or three medication review. Targeting repeat medication reviews to patients with identifiable issues should aid resource management, increase efficiency, and support improved patient safety.

STU is being developed in partnership between NHS Lothian, the Scottish Government Therapeutics Branch and Albasoft®. Those practices involved in the Lean in Lothian Repeat Prescribing project 2008-2010 will recognise that the programme is in essence a rebuild of the repeat prescribing analysis tool developed for GPASS. STU is currently being piloted in 17 Vision practices in Lothian and seven EMIS practices in Forth Valley and Greater Glasgow and Clyde. A number of clinical development enhancements are planned before STU is made available to all practices at some time in 2014. The aim for the future is to develop STU to provide a simple user interface to generate therapeutics reports to aid targeted quality improvement.

References:
2. Prescribing Information System for Scotland (PRISMS). Information Services Division. NHS Scotland. Data accessed 02.03.14

Supplement: Recent SMC and Lothian Formulary Committee Recommendations
The supplements can be accessed via the LJF website [www.ljf.scot.nhs.uk](http://www.ljf.scot.nhs.uk) in ‘Prescribing Bulletins’.

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