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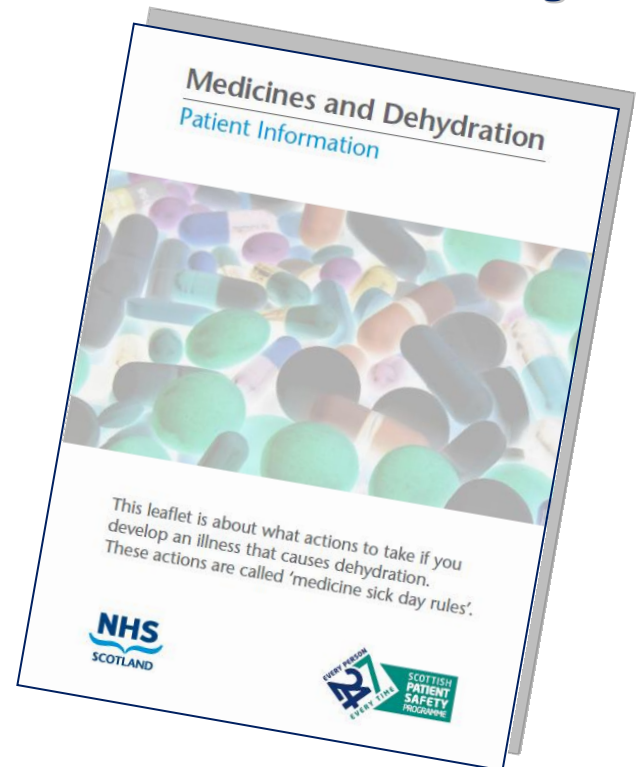
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Avoid acute kidney injury: stop medicines... then start again


Acute kidney injury (AKI) is a clinical syndrome that is common, harmful and often avoidable. It is more common in older patients, particularly those with chronic kidney disease or other comorbidity. It often starts in the community when a vulnerable patient develops an intercurrent illness such as diarrhoea, vomiting or infection.¹ 'Sick day rules' aim to improve the management of episodes of acute illness with the temporary cessation of potentially nephrotoxic drugs.

Medicine Sick Day Rules cards (see below), which complement the updated Polypharmacy Guidance², are now available via the NHS Scotland [Scottish Patient Safety Programme](#). These were developed, tested and evaluated in NHS Highland with input from patients, carers, pharmacists and doctors. The cards are a useful resource for patients, carers, and health professionals. They raise awareness of potential harms if patients continue to take certain widely prescribed medicines whilst suffering from a dehydrating illness.

These cards will be distributed to all GP practices, community pharmacies and hospitals. These cards should be available to give to patients during consultations.



A [Patient information leaflet](#) and a [Briefing for professionals](#) are also available.



Medicine Sick Day Rules


When you are unwell with any of the following:

- Vomiting or diarrhoea (unless only minor)
- Fevers, sweats and shaking

Then STOP taking the medicines listed overleaf

Restart when you are well (after 24-48 hours of eating and drinking normally)

If you are in any doubt, contact your pharmacist, GP or nurse



Medicines to stop on sick days

- ☐ ACE inhibitors: medicine names ending in "pril"
eg, lisinopril, perindopril, ramipril
- ☐ ARBs: medicine names ending in "sartan"
eg, losartan, candesartan, valsartan
- ☐ NSAIDs: anti-inflammatory pain killers
eg, ibuprofen, diclofenac, naproxen
- ☐ Diuretics: sometimes called "water pills"
eg, furosemide, spironolactone, indapamide, bendroflumethiazide
- ☐ Metformin: a medicine for diabetes

Initially produced by NHS Highland

References

1. Sick day rules in kidney disease. DTB 2015 53: 37. April 2, 2015. <http://dtb.bmj.com/content/53/4/37.full.pdf+html?hwoasp=authn%3A1438091361%3A4130224%3A3107628074%3A0%3A0%3AAOb0sS UET62F8b7hUPN9yw%3D%3D>
2. Polypharmacy Guidance. The Scottish Government. March 2015. www.sehd.scot.nhs.uk/publications/DC20150415polypharmacy.pdf

Thanks to Karen Reid, Lead Integrated Care Pharmacist, RIE, and
Dr Caroline Whitworth, Consultant Nephrologist, for contributing this article.

View the Lothian Joint Formulary at www.ljf.scot.nhs.uk

Bipolar disorder in adults

LJF advice for the management of bipolar disorder has been reviewed following the publication of [NICE Clinical Guidance 185](#).

Section [4.2.1](#) and [4.2.3](#) of the LJF have been amended.

Haloperidol replaces chlorpromazine. The initial choice of antipsychotic is guided by differing side-effect profiles.

- A new prescribing note reminds prescribers that if the patient develops mania or hypomania whilst on an antidepressant, in addition to starting an antipsychotic, consideration should be given to stopping the antidepressant.

If starting an antidepressant in patients with bipolar disorder, an SSRI with a short half-life should be chosen, e.g. sertraline (half-life 26 hours) rather than fluoxetine (half-life 96-144 hours). It takes approximately 3 to 5 half-lives for all of a drug to be eliminated from the body. An SSRI with a long half-life can make the management of a manic episode more difficult. Olanzapine is now joint second choice with

sodium valproate for maintenance treatment. Lithium remains first choice.

- The reference range for lithium levels recently changed in Lothian. Full information on the safe prescribing of lithium is detailed in the [Lithium guidelines](#) (only available via the intranet). Care should be taken to minimise drug interactions with lithium.
- Following [MHRA drug safety advice](#) regarding sodium valproate and use in women, prescribing notes have been added, including a link to the full MHRA advice. Sodium valproate should not be prescribed to women of childbearing potential or pregnant women unless other treatments are ineffective or not tolerated. There needs to be ongoing review of balance of benefits against risks in each patient. All female patients should be informed of and understand the risks associated with valproate during pregnancy, the need to use effective contraception, and the need to rapidly consult if she is planning a pregnancy or becomes pregnant.

Asthma in children

[Chapter 3 Respiratory](#) in the paediatric formulary was recently reviewed. There were lots of changes to the information contained in the prescribing notes and some of these are summarised below.

The choice of inhaler device should take into consideration the ability of the child, their age and developmental skills. All children and carers should be properly trained on the use of the inhaler device. In general terms a child primary 4 (approx. aged 8) or above, with the correct training is competent to use a dry powder inhaler.

In **acute severe asthma**, salbutamol is administered as 'multidosing' (10 puffs of a salbutamol MDI via a spacer device). Each actuation should be followed by 5 to 6 breaths using the mouthpiece or by holding the face mask in place. Each actuation should be 30 seconds apart.

Dosing can be escalated further in hospital ([acute wheeze management flow chart](#)). On discharge from hospital children will continue on 4 puffs salbutamol 4 times a day for 4 days and will complete at least a 3-day course of oral prednisolone.

Local advice is that children who receive a single course of systemic corticosteroids for up to 5 days do not routinely require a reducing course. Criteria for a reducing course are included in the prescribing notes.

There are four different **Aerochamber® Plus devices** and correct prescribing is based on age: orange (with mask) <1 year, yellow (with mask) 1-8 years, blue (with mouthpiece) >8 years (or with mask for those not able to use the mouthpiece).

A previous [LPB article](#) (Issue 57, September 2012) detailed **equivalent steroid doses** and the dose that **adrenal suppression** can start to occur. This information has now been added to the prescribing notes and also when to refer for assessment of adrenal suppression. Children receiving the equivalent of 800micrograms beclomethasone daily should be given a steroid card. All children should have their height and weight checked at their regular reviews.

Antipsychotics in dementia – are the risks worth it?

Antipsychotic drugs may be helpful for a minority of patients who demonstrate marked aggression, severe agitation or distressing psychotic symptoms.¹ Antipsychotics have only limited benefit in treating behavioural and psychological symptoms of dementia (BPSD) and carry significant risk of harm.² Side-effects include excessive sedation, dizziness and unsteadiness leading to falls, as well as Parkinsonism, restlessness, reduced wellbeing, social withdrawal and increased cognitive decline. Research has shown that there is up to a nine-fold risk of stroke in the first four weeks and that there is almost a doubling in the risk of mortality.³

Around 90% of people with dementia experience BPSD at some stage during their dementia. These symptoms can include agitation, aggression, hallucinations and delusions and can develop as part of the dementia, or be secondary to general health problems, e.g. pain, infections, hunger or thirst, their environment or social interactions.⁴

The first step in managing BPSD is to identify and treat any underlying causes. Simple psychosocial approaches can be very effective; more information can be found in the Alzheimer's Society 'Changes in behaviour' factsheet. Most symptoms resolve within four weeks without pharmacological intervention.⁴

Risperidone is currently the only antipsychotic licensed for short term use (up to six weeks) for persistent aggression in patients with moderate to severe Alzheimer's dementia.⁵ Antipsychotics should be started at the lowest possible dose, carefully titrated and monitored with regular review.¹

Key messages



Antipsychotics have only limited benefit in treating BPSD and carry significant risk of harm.



Antipsychotics are the second line treatment after psychosocial interventions in the management of BPSD.



Patients prescribed an antipsychotic for BPSD should be reviewed every 12 weeks to assess ongoing need for treatment.

Stopping antipsychotics in dementia

All patients with dementia who have been prescribed an antipsychotic for more than 12 weeks should have a review of treatment and the ongoing need for treatment should be documented. Priority should be given to review patients in care homes, patients with vascular dementia and those with cardiovascular disease, cerebrovascular disease and vascular risk factors.

Patients with a co-morbid mental illness treated with an antipsychotic should not have this treatment reduced or stopped.

STEP 1

Reduce the dose of antipsychotic by 25% of the total daily dose. Antipsychotics prescribed at the recommended starting dose may be discontinued without tapering the dose.

STEP 2

Review the effect of the dosage reduction / discontinuation after one week to assess for recurrence of initial target symptoms or for discontinuation symptoms (i.e. nausea, vomiting, anorexia, diarrhoea, rhinorrhoea, sweating, myalgia, insomnia, anxiety, restlessness and agitation, beginning within 1 to 4 days of dose reduction and continuing for approximately 7-14 days). If there are no significant problems, continue with the same dose and review again in four weeks (for risperidone and haloperidol) or two weeks (for quetiapine). If symptoms occur, consider the risks and benefits of re-instating the previous dose with a review again one month later reducing the dose by 10% of the total daily dose.

STEP 3

If the reduction has been tolerated the dose can be reduced by a further 25% of the total daily dose and repeat the process. Continue to repeat the process until the recommended starting dose is reached then discontinue.²

References/ Useful resources

1. Lothian Joint Formulary. www.ljf.scot.nhs.uk
2. Scottish Government Model of Care Polypharmacy Working Group. Polypharmacy Guidance. 2nd edition. The Scottish Government. March 2015. www.sehd.scot.nhs.uk/publications/DC20150415polypharmacy.pdf
3. Antipsychotic drugs. Alzheimer's Society. www.alzheimers.org.uk/site/scripts/documents_info.php?documentID=548
4. Treating behavioural and psychological symptoms of dementia. Alzheimer's Society. www.alzheimers.org.uk/site/scripts/documents_info.php?documentID=1191
5. British National Formulary. www.bnf.org

Thanks to Fiona Robertson, Senior Pharmacist, Royal Edinburgh Hospital, for contributing this article.

Yellow Card Centre Scotland – keep App!

Background

Yellow Cards should be used to report the following adverse drug reactions (ADRs) to the MHRA:

- All suspected ADRs to 'black triangle' ▼ medicines and vaccines.
- Serious ADRs for any medicine or vaccine, e.g. reactions which are fatal, life-threatening, disabling, incapacitating, result in congenital abnormalities, result in prolonged hospitalisation or are otherwise medically significant.
- Yellow Cards should also be considered for patients over 65 years; biological medicines; complementary therapies such as homeopathic and herbal remedies and delayed drug effects.

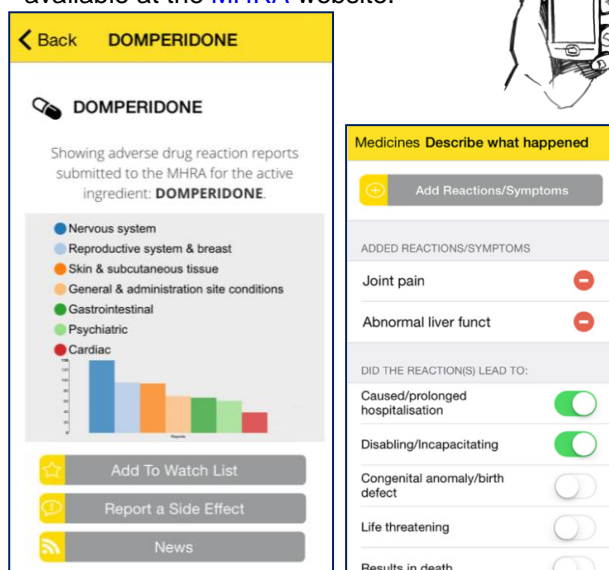
You can submit a Yellow Card online, by post or via the app. See more on the [Yellow Card Centre \(YCC\) Scotland website](#).

General update

- The online [Yellow Card Scheme Platform](#) has expanded to incorporate reporting for medical device adverse incidents, counterfeit or fake medicines/devices and defective medicines.
- Device-related adverse incidents should continue to be reported via local reporting systems (e.g. Datix) but, if harm comes to patients due to a medical device, a report via Yellow Card is also encouraged.
- The Yellow Card Centre (YCC) Scotland and NHS Education Scotland (NES) have developed six interactive e-Learning modules on Adverse Drug Reactions (ADRs). They are targeted at all healthcare professions and available via LearnPro accounts in NHS Lothian, [the YCC Scotland website](#) or the [NES website](#).

The Yellow Card App

The new Yellow Card smartphone app is available at the [MHRA](#) website.



Examples of how to use the YC App (data are from spontaneous reports based upon suspicion of associated side effects).

50th anniversary

- A conference to celebrate the 50th anniversary of the Yellow Card Scheme was held in Edinburgh in March 2015.
- Since the scheme was started an estimated 750,000 reports have been lodged and contribute to the ongoing monitoring of the safety of medicines after they are licensed.
- The Yellow Card Scheme is evolving, taking account of scientific innovation in medical technology and developments in the delivery of healthcare.



For more information please see the YCC article in [LPB issue 58](#) (November 2012).

Thanks to Donna Watson, Sheila Noble and Melinda Cuthbert, YCC Scotland, for contributing this article

Supplement: Recent SMC and Lothian Formulary Committee Recommendations

The supplements can be accessed via the LJF website www.ljf.scot.nhs.uk in 'Prescribing Bulletins'.

Editorial Team:

Ms Hazel Brown, Integrated Care Pharmacist
Ms Alison Coll, Lead Pharmacist for Medical Education
Dr Adrian Cullen, General Practitioner
Ms Tracy Duff, Pharmacist, Medicines Information
Ms Anne Gilchrist, Lead Pharmacist, MMT (Chair)
Dr Sara Hornibrook, General Practitioner
Dr Simon Hurding, General Practitioner, MMT

Correspondence address:
Medicines Management Team (MMT)
Pentland House
47 Robb's Loan
Edinburgh
EH14 1TY
Tel: 0131 537 8461
Email: prescribing@nhslothian.scot.nhs.uk

Ms Katrine Finderup Nielsen, MMT Administrator
Ms Jane Pearson, Formulary Pharmacist
Ms Katy Williams, Prescribing Support Pharmacist
Dr Richard Williams, GP Sub-Committee
Ms Anne Young, Primary Care Pharmacist

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