NHS Lothian

# LOTHIAN PRESCRIBING BULLETIN

Supporting prescribing excellence - informing colleagues in primary and secondary care

Issue 102 March 2020

## HEPMA is coming!

### What is HEPMA?

Hospital Electronic Prescribing and Medicines Administration (HEPMA) is the exciting new system that will replace the current paper prescribing and medication administration within NHS Lothian. The HEPMA system that has been chosen for Lothian is WellSky (formerly known as JAC). The WellSky HEPMA software is a web-based application, meaning it will be accessible from any device (PC, tablet, WYSE terminal) which is connected to NHS Lothian's network.

### Why implement HEPMA?

NHS Scotland has strategically committed to HEPMA and systems have already been implemented in four Health Boards across the country to date - Ayrshire and Arran, Dumfries and Galloway, Forth Valley and Lanarkshire.

The advantages of HEPMA are numerous and are nationally recognised. Improvement in patient safety is the key driver for any HEPMA implementation, achieved by building a robust prescribing platform.

Benefits of the HEPMA system include:

- Legible and accurate prescriptions
- Clinical decision support, for example, allergy and interaction checking
- Reduction in prescribing transcription
- Remote access to patients' prescription and medicines administration records
- Improved medicines reporting.

### When is HEPMA coming to me?

HEPMA implementation will be phased on a site by site basis and will focus on in-patient wards initially. Implementation will start at the Royal Edinburgh Hospital on 17 March 2020 at the Orchard Clinic. Ward rollout will continue thereafter until site completion. The Western General Hospital has been agreed by the HEPMA Programme Board as the second site for implementation and the order thereafter will be agreed as the programme continues.

### What do I need to do?

- Attend HEPMA awareness sessions as they occur on each site prior to implementation.
- Attend HEPMA training when offered for your area of work.
- Be aware of patients transferring from a HEPMA ward to a non-HEPMA ward with printed HEPMA prescription charts.
- Say "hello" to members of the HEPMA team in the purple polo shirts as you see them around the hospital!

Further information will be available shortly on the HEPMA intranet page.

To contact the HEPMA team with any questions, please email: HEPMATeam@nhslothian.scot.nhs.uk

*Thanks to Samantha Kujawa and Sheeba Zahir, Pre-registration Pharmacists for contributing to this article.*

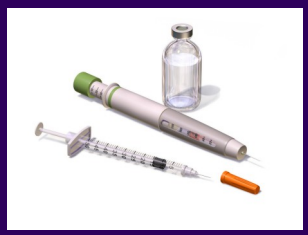
**HEPMA**
**HOSPITAL ELECTRONIC PRESCRIBING & MEDICINES ADMINISTRATION**



# Reducing the risks of adrenal crisis - adults and children

Adrenal crisis is a life-threatening consequence of hypoadrenalism. It can result in reduced consciousness, significant hypotension, hyponatraemia and ultimately death. Individuals most at risk are those with primary disorders of the adrenal glands (such as Addison's disease and post-bilateral adrenalectomy) and people with hypopituitarism. The physiological demand of intercurrent illness or a stress event results in an increased steroid requirement in everyone. In someone with hypoadrenalism this demand can only be met by increasing the dose of steroid replacement therapy.

**In an emergency situation**



Many individuals with hypoadrenalism and their family members are now taught by endocrine teams to administer **intramuscular hydrocortisone** in an emergency situation. The intramuscular injection is meant to be a bridge until the patient gets to hospital for further assessment and treatment; it is **not designed to be an alternative to hospital admission**. In practice, despite appropriate education, many patients and family members do not give emergency hydrocortisone. There are many possible reasons for this including simply forgetting in the 'heat' of the emergency situation, being anxious about 'doing the injection wrong' or finding the hydrocortisone 'out-of-date'. The endocrine teams in Lothian are revising the educational information given to patients to empower them and their relatives to administer intramuscular hydrocortisone in an emergency. Patients are being advised to use the term 'adrenal crisis' when phoning emergency services.

All individuals (not just those with hypoadrenalism) on long-term steroids are at risk of adrenal crisis if they stop their medication suddenly (have a vomiting illness or are unable to swallow). After two weeks' treatment with high dose steroids, there is evidence of adrenal suppression. This is why tapering of steroid dose is advised rather than a sudden cessation if the course is longer than two weeks.

Therefore, we would advise discussing actions to be taken during intercurrent illness or a stress event with all patients on long term steroids. All children on long-term high dose steroids should have a tailored plan on TRAK and KIS (Key Information Summary) regarding what action should be taken with a vomiting illness or accident, and on urgent admission to hospital. Patients taking very high doses of inhaled or topical steroids should be advised to continue taking these medications during intercurrent illness, although the risk of adrenal crisis is lower.

Adrenal crisis is potentially very serious and many patients, especially those on long-term steroids for non-endocrine disorders, do not appreciate that they are at risk. Adrenal crisis is largely preventable, providing the appropriate steps are taken.

**Sick day rules**

The Pituitary Foundation produces an excellent information leaflet for 'sick day rules' in hypoadrenalism. For children, there is guidance on the Scottish Paediatric Endocrine Group (SPEG) website. Endocrine teams already place alerts on TRAK for patients with hypoadrenalism and place a clinical alert on the Scottish Ambulance Service system. Primary care teams are to be asked to place specific information about hypoadrenalism and 'sick day rules' in the KIS for these patients.

NB. It is important to remember that people on long-term steroid therapy for non-endocrine disorders (such as inflammatory arthritis and polymyalgia rheumatica) are also at risk of hypoadrenalism. They should follow the same 'sick day rules' as for patients with known hypoadrenalism.

| **prednisolone dose or equivalent** | **Advice for 'Sick Days'** |
|---|---|
| Adult on **less than** 7.5mg/day | Double the dose |
| Child under 16 years on **less than** 2.5mg/$m^2$/day | Will need to increase steroid dose.<br>Any child on long term steroids should have an individualized management plan. |
| Adult on 7.5mg/day or more | Do not need to double the dose, but they must continue to take their usual dose of steroids. |
| Child under 16 years on 2.5mg/$m^2$/day or more | Do not need to double the dose, but they must continue to take their usual dose of steroids. |

***"...people on long-term steroid therapy for non-endocrine disorders... are also at risk of hypoadrenalism"***

*Thanks to Professor Mark Strachan, Consultant Endocrinologist, Western General Hospital and Dr Louise Bath, Consultant Paediatric Endocrinologist, Royal Hospital for Sick Children, for contributing this article.*

## Domperi'*done*' in children?

Domperidone is an established dopamine antagonist with antiemetic properties which is licensed for nausea and vomiting in paediatrics. However, the recent December MHRA Drug Safety Update concluded there are limited data available to support its efficacy for this indication. This statement is based on a double-blinded, placebo-controlled trial which investigated 292 children suffering with acute gastroenteritis (age ranges between six months and 12 years).

All patients received oral rehydration therapies (ORT) and were randomised to domperidone oral suspension 0.25mg/kg (maximum of 30mg per day) or placebo, three times a day, for seven days.

The study did not display any significant difference between the combination of domperidone suspension and ORT compared to placebo plus ORT at relieving nausea symptoms.

These results were further highlighted within a European review, leading to the change in licensing of domperidone. In conclusion, domperidone is unlicensed in children under 12 years old or weighing less than 35kg, therefore use outwith these terms would be off-label prescribing.

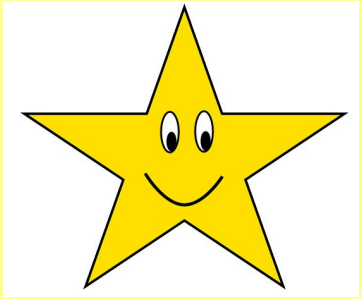
However, specialists, using their clinical judgement, may still choose to prescribe domperidone as the most appropriate treatment. Therefore, the specialist would need to counsel the parent/caregiver on the off-label use of domperidone, alongside all the possible risks and benefits of the drug.

*Thanks to Saiyra Bhatti, Pre-registration pharmacist for contributing this article.*

## "One cannot have too much yellow"*

Thank you to everyone who submitted a Yellow Card regarding a suspected adverse drug reaction last year whether using the electronic Yellow Card, the App or even using a paper version from the back of the BNF. YellowCard Centre Scotland is pleased to report that NHS Lothian continues to be well above the Scottish average for Yellow Card (YC) reports (33 reports per 100K population compared with average of 26).

Across Scotland, YC reporting has remained stable since the previous year with an increase in patient reporting (33% of all reports) balanced against a slight decline in reporting by Healthcare Professionals (HCPs). The importance of HCP reporting must be emphasised especially in these times of workforce pressures. You can view the YCC Scotland Annual report for 2018-19 to find out how your profession has been faring in YC reporting, identify the most commonly reported drugs, and read about initiatives to improve reporting in the future.



* Pierre Bonnard (1867-1947), 20th Century Artist

## Baby steps — folate, coeliac disease and pregnancy planning

Folate (folic acid or vitamin B9) deficiency is associated with neural tube defects (NTDs) in babies. The risk of this happening is clearly low but folate supplementation in pre-conception and the first 12 weeks of pregnancy is likely to reduce the risk.

For the general population, women who are considering planning a pregnancy, it is recommended they have folic acid supplement for three months before conception and for the first 12 weeks of pregnancy at doses of 400 micrograms daily. Folic acid 400 micrograms is widely available from supermarkets and pharmacies.

NICE CKS guidance notes that some couples may be considered a high risk for NTD if: [1]

- Either partner has had a previous pregnancy affected by NTD or a family history of NTD
- The woman is taking anti-epileptic medication
- The woman has diabetes, sickle cell anaemia or thalassaemia
- The woman is classed as obese (BMI more than 30kg/m$^2$)

Where the couple is considered a high risk for NTDs, it is recommended the woman takes folic acid 5mg daily for three months before conception and for the first 12 weeks of pregnancy. If the woman has sickle cell anaemia or thalassaemia, then they should take folic acid 5mg daily for the full duration of their pregnancy. Folic acid 5mg is prescription only.

**Did you know?**

Coeliac patients are recommended to take 5mg folic acid daily for three months before and until 12 weeks into their pregnancy[2]. There is no evidence to suggest coeliac patients are at higher risk of NTD. Nonetheless, the higher dose is precautionary in case the patient has damage in the gut affecting the absorption of vitamins, including folic acid.

References:

1. https://cks.nice.org.uk/pre-conception-advice-and-management#!scenarioRecommendation:3

2. https://www.coeliac.org.uk/information-and-support/living-gluten-free/the-gluten-free-diet/gluten-free-when-pregnant/

*Thanks to Dr Peter Gillett, Consultant, Royal Hospital for Sick Children for contributing this article.*

## LJF Update... LJF Update... LJF Update...

A summary of the information relating to LJF amendments can be found on the LJF website and you should look at the relevant LJF section to see all the current information.

There have been a number of minor changes to the LJF content; the main ones are described in more detail below:

**Couple of changes in preferred biosimilar products**

(remember biosimilar products should be prescribed by brand name.)

- **Insulin section 6.1.1**

**Humalog®** is no longer the preferred brand of insulin lispro. The product that should be prescribed is **insulin lispro Sanofi®**.

- **Osteoporosis section 6.6b**

Teriparatide is a specialist use only medicine for the treatment of postmenopausal osteoporosis. The preferred brand has changed to **Terrosa®**.

**Discontinued product**

Sodium aurothiomalate (Myocrisin) is no longer available as it has been discontinued. The shared care agreement has also been deleted from the website. Patients will need to be started on another DMARD.

**ps....**

Referring back to the LJF amendments for November, and linked to the article in this issue, LJF Section 6.3 was updated to include information on doubling steroid dose when patients take less than 7.5mg prednisolone or equivalent.