Medicines Optimisation Monthly Newsletter

Introduction

Welcome to our monthly Medicines Optimisation Team newsletter for GP practices and providers. This aims to highlight current updates, issues and guidelines around medication and to support prescribers and practices, pulling together information from various resources to provide a one-stop summary and useful links.

Items covered in this newsletter include:

New or updated NICE guidance

The latest NICE guidance on medicines includes:

Acute kidney injury: prevention, detection and management. NICE guideline [NG148] Published date: December 2019. We have only re-produced some relevant parts of the guidance below - please access the full guidance via the following link NICE Guideline NG148.

Preventing acute kidney injury in adults having iodine-based contrast media

1.2.7 Encourage oral hydration before and after procedures using intravenous iodine-based contrast media in adults at increased risk of contrast-induced acute kidney injury (see recommendation 1.1.6). **[2019]**

1.2.8 For inpatients having iodine-based contrast media, consider intravenous volume expansion with either isotonic sodium bicarbonate or 0.9% sodium chloride if they are at particularly high risk, for example, if:

- they have an eGFR less than 30 ml/min/1.73 m^2
- they have had a renal transplant
- a large volume of contrast medium is being used (for example, higher than the standard diagnostic dose or repeat administration within 24 hours)
- intra-arterial administration of contrast medium with first-pass renal exposure is being used.

  For more information on managing intravenous fluid therapy, see the NICE guideline on intravenous fluid therapy in adults in hospital. **[2019]**

1.2.9 Consider temporarily stopping ACE inhibitors and ARBs in adults having iodine-based contrast media if they have chronic kidney disease with an eGFR less than 40 ml/min/1.73 m^2. **[2013]**

1.2.10 Discuss the person's care with a nephrology team before offering iodine-based contrast media to adults on renal replacement therapy, including people with a renal transplant, but do not delay emergency imaging for this. **[2019]**

Pharmacological management

1.5.3 Do not routinely offer loop diuretics to treat acute kidney injury. **[2013]**

1.5.4 Consider loop diuretics for treating fluid overload or oedema while:

- an adult, child or young person is awaiting renal replacement therapy **or**
- renal function is recovering in an adult, child or young person not receiving renal replacement therapy. **[2013]**

1.5.5 Do not offer low-dose dopamine to treat acute kidney injury. **[2013]**

1.6 Information and support for patients and carers

1.6.1 Discuss immediate treatment options, monitoring, prognosis and support options as soon as possible with people with acute kidney injury and/or, if appropriate, their parent or carer. Follow the recommendations on patient views and preferences and shared decision making in the NICE guideline on patient experience in adult NHS services. **[2013]**

1.6.2 Give information about long-term treatment options, monitoring, self-management and support to people who have had acute kidney injury (and/or their parent or carer, if appropriate) in collaboration with a multidisciplinary team appropriate to the person's individual needs. **[2013]**

1.6.3 Give information about future care to people needing renal replacement therapy after discharge following acute kidney injury. This should include information about the frequency and length of dialysis sessions and the preparation needed (such as having a fistula or peritoneal catheter). **[2013]**

1.6.4 Discuss the risk of developing acute kidney injury, particularly the risk associated with conditions leading to dehydration (for example, diarrhoea and vomiting) and drugs that can cause or exacerbate kidney injury (including over-the-counter NSAIDs), with people who are at risk of acute kidney injury, particularly those who have:

- chronic kidney disease with an eGFR less than 60 ml/min/1.73 m^2
- neurological or cognitive impairment or disability, which may mean limited access to fluids because of reliance on a carer.

Involve parents and carers in the discussion if appropriate. **[2013]**

Medicines Supply Issues

The following table provides an update on medicines supply issues. If you would like more detailed information or would like a copy of the bulletin then please email the generic medsop inbox medopsqueries@stoke.nhs.uk or southstaffs.medsoptimisation@nhs.net.

New issues	Ongoing issues	Resolved issues
Azathioprine 25mg tablets	Carbagen 200mg and 400mg immediate release tablets, Carbagen 200mg and 400mg modified release tablets	Alprostadil (Muse) 500mcg/1000mcg urethral sticks (1/20)
Histamine (H2) antagonists (Famotidine 20mg tablets, Cimetidine 200mg tablets, Nizatidine 150mg and 300mg tablets)	Clonidine 25microgram tablets	Cefuroxime (Zinnat) 125mg/5ml oral suspension (16/12/19)
Adcal D3 dissolve 1500mg/400IU effervescent tablets	Co–careldopa 25mg/100mg tablets	Colestipol (Colestid) Orange 5g granules (23/12/19)
Opicapone (Ongentys) 50mg capsules	Co-fluampicil 250mg/250mg capsules	Diclofenac 75mg and misoprostol 200mcg (Arthrotec 75) modified release tablets (13/1/20)
Phenytoin 100mg capsules	Colestipol (Colestid) 5g granules	Digoxin (Lanoxin) 250mcg/ml injection (9/1/20)
Prazosin (Hypovase) 500mcg tablets	Colestyramine (Questran) Powder for Oral Suspension	Estraderm 100 microgram transdermal patch (10/1/2020)
Valproic acid (Convulex) 150mg/300mg/500mg capsules	Diazepam 2mg/5ml oral solution	Flixotide 2mg/2ml nebules (1/20)
Venlafaxine XL (Efexor) 75mg/150mg capsules	Disopyramide 150mg capsules	Fluorouracil (Efudix) 5% cream (19/12/19)
Sofradex ear/eye drops	Eletriptan (Relpax) 20mg tablets	Fluoxetine 30mg capsules (8/1/20)
Calcium Chloride 10mmol/10ml and 5mmol/5ml injection	Ethinylestradiol 10microgram/50microgram tablets	Loteprednol etabonate (Lotemax) 0.5% eye drops (1/20)
Epirubicin 10mg/50mg/100mg solution	Fluoxetine 20mg dispersible tablets (Olena)	Medroxyprogesterone (Provera) 100mg tablets

for injection		(6/1/20)
Somatropin (Genotropin) 12mg refill cartridges	Galantamine 8mg/12mg tablets	Medroxyprogesterone (Provera) 200mg tablets (20/12/19)
Vecuronium 10mg powder for solution for injection	Haloperidol (Serenace) 500 microgram capsules	Mydrane (lidocaine 10mg/1ml+tropicamide 0.2 mg/1ml+phenylephrine 3.1 mg/1ml) solution for injection (19/12/19)
Verteporfin (Visudyne) 15mg powder for solution for infusion	Hormone Replacement Therapy products (HRT): Elleste oral HRT Range, Evorel transdermal patch range, FemSeven transdermal patch range, Indivina (estradiol/medroxyprogesterone) 1mg/2.5mg, 1mg/5mg and 2mg/5mg tablets, Sandrena (estradiol hemihydrate) 0.5mg gel, Bedol 2mg tablets, Ethinylestradiol 10mcg & 50mcg tablets, Clinorette tablets [2mg, 2mg]/ 1mg, Cyclo-progynova tablets 2mg/500mcg	Testosterone (Tostran) 2% gel (1/20)
	Lansoprazole (Zoton FasTabs) 15mg and 30mg dispersible tablets	Tobramycin 240mg/6ml injection (20/1/20)
	Levofloxacin 250mg tablets	
	Methadone (Physeptone) 1mg/ml sugar free oral solution	
	Metoprolol 50mg and 100mg tablets	
	Mianserin 10mg/30mg tablets	
	Moclobemide 150mg and 300mg tablets	
	Nifedipine (Adalat) tablets	
	Oral Contraceptive Pill products (OCP): Noriday (norethisterone) 350 micrograms tablet, Norimin (ethinylestradiol/norethisterone) 0.035mg/1mg tablets, Synphase (ethinylestradiol and norethisterone) tablets	
	Paroxetine (Seroxat) 10mg/5ml oral solution	

	Pethidine 50mg tablets	
	Phenelzine sulfate (Nardil) 15mg tablets	
	Phenytoin (Epanutin) 50mg Chewable Infatabs	
	Prazosin (Hypovase) 1mg tablets	
	Quinapril (Accupro) 40mg tablets	
	Quinapril 10mg/hydrochlorothiazide 12.5mg (Accuretic) tablets	
	Ranitidine oral preparations	
	Trifluoperazine 1mg and 5mg tablets	
	Tuberculosis medications – there are some out of stock issues. Please contact us if you require more information.	
	Fentanyl (Instanyl) 50mcg nasal spray	
	Fludroxycortide 0.0125% cream and ointment	
	Mesalazine (Salofalk) 500mg/1g suppositories	
	Cyclopentolate hydrochloride 0.5%/1% Minims (Bausch and Lomb) eye drops	
	Phenylephrine 2.5%/10% Minims eye drops solution (Bausch and Lomb)	
	Trifluorothymidine (trifluridine F3T) 1% eye drops (unlicensed special)	
	Hepatitis B Vaccines (renal dose & adult dose)	
	Measles, Mumps and Rubella (MMR) vaccine	
	Pneumococcal Polysaccharide Vaccine 23-valent vaccine (PPV23) vials and Pneumovax 23 pre-filled syringes	
	Rabies vaccine (Rabipur)	
	Combined hepatitis A & B (Twinrix)	
	Emerade (Bausch & Lomb UK Ltd)	
	Jext (ALK-Abello Ltd) 150 microgram and 300mcg devices	
	EpiPen/EpiPen Junior (Mylan)	
	Adrenaline 1:1000 ampoules for anaphylaxis kits	
	Amikacin 100mg/2ml injection	

	Botulinum toxin type A (Azzalure) 125unit injection	
	Crisantaspase (Erwinase) injection	
	Diamorphine 5mg and 10mg injection	
	Human C1-esterase inhibitor (Berinert) 500IU powder for reconstitution and injection	
	Medroxyprogesterone acetate (Sayana Press) 104mg injection	
	Midazolam 50mg/10ml solution for injection ampoules	
	Mitomycin 2mg/10mg/20mg injection and mitomycin 40mg intravesical solution (Mitomycin-C)	
	Oily Phenol 5% (almond oil) injection	
	Procyclidine 10mg/2ml injection	
	Sodium thiosulfate 12.5g/50ml solution for injection vials	
	Somatropin (Genotropin) 5.3mg GoQuick	
	Tetracosactide 1mg depot injection	
	Tobramycin 80mg/2ml injection	
	Urokinase (Syner-KINASE) injection	

Discontinuations

Fluphenazine decanoate (Modecate) injection (Sanofi)

• Manufacture of Modecate (fluphenazine decanoate) injection has ceased

• Existing stock of Modecate Injection (25 mg/ml) expired in August 2019.

• Existing stock of Modecate Concentrate Injection (100 mg/ml) will expire in August 2020 – stock will not be released after 29th February 2020.

• Prescribers should complete arrangements to transfer patients on Modecate to therapeutic alternatives under medical supervision.

• Unlicensed imports are available; lead times vary.

Ketotifen (Zaditen) 1mg/5ml elixir (Alfasigma)

• Alfasigma are withdrawing Zaditen 1mg/5ml elixir from the UK market.

• Unlicensed ketotifen 1mg/5ml oral solution is available from importers; lead times vary.

Ribavirin (Rebetol) 200mg capsules (MSD)

• MSD are discontinuing Rebetol 200mg capsules at the end of January 2020.

• Supplies of generic ribavirin remain available from Aurobindo-Milpharm.

Upcoming Health Campaigns

The NHS Employers website contains information on key health campaigns for the year, and for March 2020 this is as follows:

2nd to 8th March 2020 – Eating Disorders Awareness Week:

Eating Disorders Awareness week is an international awareness event, fighting the myths and misunderstandings that surround eating disorders. Awareness is raised to spotlight the impact eating disorders can have on an individual and highlight what individuals, colleagues and employers can do to support someone's recovery.

13th March – No Smoking Day.

No smoking day is to encourage and support smokers to quit the habit.

13th March – World Sleep Day.

World sleep day promotes important issues related to sleep, including medicine, education, social aspects and driving. The aim is to lessen the burden of sleep problems on society through better prevention and management of sleep disorders.

16th – 22nd March – Nutrition and Hydration Week.

This global movement aims to focus on nutrition and hydration as an important part of quality care, experience and safety improvement in health and social care settings.

20th March 2020 – World Oral Health day.

90% of the world's population will suffer from oral diseases in their lifetime and many of them can be avoided with increased governmental, health association and society support and funding for prevention, detection and treatment programmes. World Oral Health Day offers the dental and oral health community a platform to take action and help reduce the overall disease burden.

Please visit the website for full details including links to campaign websites: NHS employers website - calendar of health campaigns 2020/21

A focus on a dangerous drug interaction/prescribing issue

There have been reports of two deaths resulting from controlled drug prescribing:

1. The first - due to an interaction between **Amitriptyline and Oxycodone.** This combination can increase the risk of **serotonin syndrome.** Symptoms include:

- Confusion
- Hallucinations
- Seizures
- Extreme changes in blood pressure
- Increased heart rate
- Fever
- Excessive sweating
- Shivering or shaking
- Blurred vision
- Muscle spasm or stiffness
- Tremor
- Inco-ordination
- Stomach cramp
- Nausea
- Vomiting
- Diarrhoea

Severe cases may result in coma and death.

2. The second due to **Codeine prescribing/plus OTC codeine.** Before prescribing any medicines, please be sure to check if the patient is purchasing any OTC medication. In this case the patient received toxic doses of codeine due to high dose codeine prescribing plus purchase of OTC codeine containing medicines.

Drug Safety Update - https://www.gov.uk/drug-safety-update

Domperidone is no longer licensed in those under 12 years of age or those weighing less than 35kg due to a lack of evidence of benefit. Please access the full MHRA alert via the following link Drug Safety Update Dec 2019 as this contains important detailed information.

This update also contains details of the contra-indications, dose and treatment durations that were introduced for adults and adolescents in 2014, as well as a reminder about the more recent alert regarding recall of Ranitidine tablets from pharmacies and retail stores due to possible contamination with NDMA (N-nitrosodimethylamine) which has potentially carcinogenic and genotoxic effects.

E-cigarette use/vaping - at the time of publication, there have been more than 60 fatal cases reported in the US. Please report suspected adverse reactions, including lung injury via the MHRA yellow card scheme. To read more about this alert, please access full information via the following link - Drug Safety Update e-cigarettes/vaping**.**

Mecasermin (Increlex▼**)** - risk of benign and malignant neoplasm. Cases of benign and malignant neoplasms have been observed among children and adolescents who received treatment with mecasermin. Do not use mecasermin in children or adolescents with active or suspected neoplasia or with any condition or medical history that increases the risk of benign or malignant neoplasia. Access the full alert here

Ondansetron - small increased risk of oral clefts following use in the first twelve weeks of pregnancy. Recent epidemiological studies suggest exposure to ondansetron during the first trimester of pregnancy is associated with a small increased risk of the baby having a cleft lip and/or cleft palate. To access the full alert click here.

Secondary Prevention of CVD - antiplatelet therapy prescribing

The following section contains information from NICE CKS (Clinical Knowledge Summaries) on antiplatelet prescribing for the secondary prevention of CVD. **Please note that guidance varies between secondary care providers, so do remember to also check local guidance.**

- **Angina**

    - Consider prescribing aspirin 75 mg daily for people with stable angina, taking into account the risk of bleeding and comorbidities.
    - Offer aspirin 75 mg as soon as possible to all people with unstable angina and continue indefinitely, unless contraindicated by bleeding risk or aspirin hypersensitivity.
        - For people in whom aspirin is contraindicated or not tolerated, consider clopidogrel 75 mg daily.
- **Atrial fibrillation (AF)**
    - Prescribing of aspirin 75 mg daily together with clopidogrel 75 mg daily may be suitable for people who are unable or unwilling to take anticoagulants. For more information, see the CKS topic on Atrial fibrillation.
- **Acute coronary syndrome (ACS)** which is medically managed (unstable angina, non-ST segment elevation myocardial infarction [NSTEMI] or ST-segment elevation myocardial infarction [STEMI]).
    - **Prescribe** — aspirin 75 mg daily plus ticagrelor 90 mg twice a day for 12 months.
        - Ticagrelor is the preferred choice (even in those previously treated with clopidogrel) unless the bleeding risk outweighs the benefit.
    - For people at high risk of bleeding, continue for at least one month.
    - For people with MI at high ischaemic risk who have tolerated treatment with the two antiplatelets without a bleeding complication, consider treatment with ticagrelor 60 mg twice daily in addition to aspirin for longer than 12 months and up to 36 months.
        - If ticagrelor is not suitable, consider clopidogrel 75 mg daily (as well as aspirin) for longer than 12 months.
- **Percutaneous coronary intervention (PCI)**.
    - **For people with ACS who are undergoing PCI**, aspirin (75–100 mg) in combination with one of the following antiplatelets is initiated in secondary care:
        - Prasugrel 10 mg daily (or 5 mg daily if the person weighs less than 60 kg, or if the person is 75 years of age or older).
        - Ticagrelor 90 mg twice a day.
        - Clopidogrel 75 mg daily (if prasugrel or ticagrelor are not suitable).
    - This treatment is usually continued for up to 12 months after the procedure, then aspirin is continued alone.
        - For people at high risk of bleeding complications, stop treatment with the two antiplatelets after 6 months and continue aspirin alone.

Prasugrel is not recommended.
        - For people who have tolerated treatment with the two antiplatelets without a bleeding complication, consider continuing treatment with the two antiplatelets for longer than 12 months, up to 36 months. Ticagrelor 60 mg twice daily is the preferred option.
    - **For people with stable coronary artery disease who are undergoing PCI**, aspirin 75 mg daily with clopidogrel 75 mg daily is initiated in secondary care and continued for 6 months.
        - Ticagrelor, or prasugrel may be considered instead of clopidogrel where appropriate.
        - For people at high risk of bleeding, continue treatment with the two antiplatelets for 3 months.
        - For people in whom 3 months of treatment with the two antiplatelets poses safety concerns, consider stopping this combination after 1 month.
        - For people who have tolerated treatment with the two antiplatelets without a bleeding complication, consider continuing treatment with the two antiplatelets for longer than 6 months, up to 36 months.
- **Coronary artery bypass grafting (CABG) — in people undergoing CABG antiplatelet treatment will be managed by specialists.**
    - People treated with two antiplatelets who then undergo CABG should continue treatment with the two antiplatelets when it is safe to do so after surgery (in accordance with specialist advice), and continue until the recommended duration of therapy is complete.
- **Stroke, or transient ischaemic attack (TIA)**
    - Clopidogrel 75 mg daily is the preferred antiplatelet medication.
    - If clopidogrel is contraindicated or not tolerated, give modified–release dipyridamole (200 mg twice a day) combined with low dose aspirin.
    - If both clopidogrel and modified-release dipyridamole are contraindicated or not tolerated, give aspirin alone.
    - If both clopidogrel and aspirin are contraindicated or not tolerated, give modified-release dipyridamole alone.
    - **Note:** Prasugrel should not be given to people with a history of stroke or TIA.
- **Peripheral arterial disease (PAD), or multivascular disease**
    - Clopidogrel 75 mg daily is the preferred antiplatelet medication.
    - If clopidogrel is contraindicated or not tolerated, give low dose aspirin alone.

For further information please visit the CKS webiste accessible via the following link CKS info - Secondary Prevention of CVD - antiplatelet therapy prescribing. Please ensure that you also access relevant up to date NICE and BNF guidance.

Sorbaderm range of barrier film preparations - discontinued

There have been some changes to the wound care formulary which are currently being presented to the membership boards for approval. In the interim, please be aware that the Sorbaderm range of barrier film preparations have been discontinued - the alternative is the Mediderma-S range. If you require any further information please contact your local Medicines Optimisation pharmacist or technician.

PINCER (Pharmacist-led IT based intervention)

PINCER is an evidence based pharmacist led intervention to reduce medication errors and potential hazardous prescribing in primary care. The national roll out is being funded by Academic Health Research Network and consists of 14 validated prescribing safety indicators developed by University of Nottingham (PRIMIS), as an integrated search on GP clinical systems. The clinical searches allows for stratification and prioritisation of patients at highest risk and identify patients who are at more than one type of risk.

Over the last few months the Medicines Optimisation team have been supporting practices to register with PRIMIS, to access PINCER searches and to facilitate initial baseline searches.

This is an excellent opportunity for GP Practices to receive the software and educational outreach support from the Medicines Optimisation team. This will also benefit the GP practice by meeting several objectives with CQC and the new GP contract as detailed below:

- PINCER PRIMIS software is recognised by CQC, this will help to complete the S4 safety monitoring indicator
- PINCER will support identification of patients who are taking medicines that are commonly associated with medication errors and this cohort of patients is listed in the

structured medication review PCN service specification

- Some PINCER indicators attract outcome related payments through the Investment and Impact Fund (IIF) scheme as part of the Network Contract DES in 2020/21

Please contact Claire Dearden Medicines Optimisation Delivery Manager if you haven't registered and would like this opportunity of support or if you have any other enquiries. Email : Claire.dearden@northstaffs.nhs.uk. or telephone : 01785 854116

Update on gender identity development service for children and young people from NHS England

The NHS updates nationally commissioned services every few years. In 2016 NHS England put in place a new service specification for gender identity development services for children and young people and committed to conducting a review of this specification and associated policies for 2020.
Gender identity development services help to support young people and their families, and usually include counselling and psychological support, and in some cases can include the prescribing of puberty suppressants and, from around 16, cross-sex hormones.

Independent review of puberty suppressants and cross sex hormones
To support this planned review, an independent expert group is being established to make recommendations on the evidence, that will support a review of puberty suppressants and cross-sex hormones and whether changes are required to existing clinical policies that underpin the use of these on the NHS.

NICE will also undertake a thorough review of the latest clinical evidence to help inform the working group's review.

Dr Hilary Cass OBE, previously a President of the Royal College of Paediatrics and Child Health, has been appointed to chair the independent group.

Dr Cass said: "This is a fast-developing area of medicine with emerging evidence and high public interest.
"I look forward to chairing this independent group, bringing together medical and non-medical experts with a range of perspectives, to make evidence-based recommendations about the

future use of these drugs."

The working group will be made up of 20 members from a range of clinical and academic backgrounds and will include members of the public. We will provide an update on the full membership shortly. The review and consideration of the evidence base is expected to complete later in the year.

Full clinical guideline

To inform the review of the wider service specification, NICE have been asked to develop guidance that will help identify when to refer children and young people to specialist services.

The wider service specification for gender identity services for children and young people will reflect the outcomes of both reviews.

Patients, families, experts and interested parties will be invited to comment on a draft specification.

The article above and also further information is available on the NHS England website, accessible via the following link NHS England news

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Newsletter contact details

For further information on any of the articles, please contact Shabana, Medicines Optimisation Pharmacist on shabana.ali@northstaffs.nhs.uk

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