The National Maternity Hospital
Vita Gloriosa Vita ~ Life Glorious Life

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THE NMH GP NEWSLETTER

A WELCOME MESSAGE FROM PROF SHANE HIGGINS, MASTER AT THE NMH

Welcome to the NMH's third and final GP newsletter for 2022. Thank you so much for your referrals and support over the past year, it is greatly appreciated. Overleaf you will find an introduction to our dedicated Pharmacy Team, who have written on topics that will be of interest to you.

Wishing you, your family and patients a very Happy Christmas and we look forward to working with you again in 2023.

Yours sincerely.

A MESSAGE FROM RACHEL IRWIN, QUALITY MANAGER AT THE NMH

I would like to take this opportunity to thank all our staff who helped organise our Annual GP Study Day. Once again we had a great attendance both online and in person and it was lovely to see so many of our GP colleagues back in the NMH. We hope you found the variety of topics and presenters interesting and applicable to your practice. Thanks to all of you who completed our survey and have sent in suggestions for 2023 and if there are any topics you would like to see covered next November please email me your suggestions to rirwin@nmh.ie

IN THIS ISSUE:

AN INTRODUCTION TO THE NMH PHARMACY TEAM

The Pharmacy team consists of pharmacists as well as pharmaceutical technicians and an intern pharmacist, who work together to ensure patients receive the highest quality pharmaceutical care possible. Our mission is to ensure safe, effective and economical use of medicines and to support education, training and research in The NMH.

A BRIEF OVERVIEW OF THE WORK WE DO

Dispensary Service - The department purchases, supplies and dispenses medicines for inpatient and outpatient use, while also offering a dispensing service to NMH staff.

Clinical Pharmacy - Our clinical pharmacists work at ward level, as part of a multi-disciplinary team approach to patient care. Specialist clinical pharmacists provide information and guidance to midwifery/nursing and medical staff in specialist areas such as Neonatology, Maternal Medicine Clinic, Obstetrics/ Gynaecology, Antimicrobial Stewardship and Healthcare Informatics.

Education and Training - A comprehensive training programme is provided to undergraduate pharmacists. Clinical pharmacists provide an in-house educational programme for midwifery/nursing and medical staff, consisting of a blend of classroom, ward-based “at-the-elbow”, and online learning.

Medication Safety - A key priority for the department is to optimise the safe use of medication for patients. This is done by identifying risks in the medication management process and preventing harm to patients by recommending measures to manage or minimise these risks. The Drugs and Therapeutics Committee and its Medication Safety Subcommittee work to promote safe medication practices in NMH. Our staff voluntarily report medication incidents, which allows us to detect and correct any errors in the medication-use system.

Medicines Information - We provide up-to-date and accurate information and advice to healthcare professionals both within the hospital and in the community setting. The service provides information on safe therapeutic use of medicines in pregnancy and lactation. Please telephone 01-6373591 or email pharmacy@nmh.ie if you have a query for one of our clinical pharmacists.

NMH PHARMACY SHORT ARTICLE CONTRIBUTIONS

Mastitis – *written by Louise Delany, Antimicrobial Pharmacist*

- Mastitis is usually caused by *Staphylococcus aureus*. Flucloxacillin or co-amoxiclav are good first line treatment options.
- If poor response to treatment or recurrent infection, ensure breast milk sample is sent for culture and sensitivity testing, as occasionally Group B *Streptococcus*, MRSA or other organism may cause mastitis.
- Referral to hospital may be necessary if suspected breast abscess, suspected sepsis or if not responding to treatment.
- Use of 'All purpose nipple ointment' is not recommended and should not be prescribed, as it contains a combination of medicinal products, including a topical antibacterial and antifungal. The use of prophylactic antibiotics in the absence of infection is not recommended. If true infection is suspected treat using appropriate systemic or topical antimicrobials.

Urinary tract infections in pregnancy – *written by Louise Delany*

Asymptomatic bacteriuria	Symptomatic bacteriuria	Upper UTI/ pyelonephritis
No clinical signs or symptoms	Dysuria	Dysuria
	Low grade fever	Pyrexia
	Suprapubic pain	Loin pain
	Increased frequency	Rigors
		Clinical signs of sepsis

Table 1. Clinical sign and symptoms of urinary tract infections.

Asymptomatic bacteriuria

- Treating asymptomatic bacteriuria in pregnancy reduces the risk of pyelonephritis, low birth weight and pre-term labour.

Symptomatic bacteriuria

- Take a mid-stream sample for urine culture before empiric treatment is started.
- If recurrent infection, a repeat urine culture should be sent a 3-7 days after the antimicrobial treatment is finished to ensure that the bacteriuria has cleared. If recurrent infection ≥3 in current pregnancy or if pyelonephritis in current pregnancy, consider antibiotic prophylaxis for remainder of pregnancy.
- Pyelonephritis in pregnancy should be initially managed as an in-patient.

MORE ON THE OTHER SIDE

Prenatal Exposure to Topiramate - Safety Update – *written by Benedetta Soldati, Maternal Medicine Clinic Pharmacist*

Topiramate is an antiseizure medication (ASM), licensed for the management of various form of epilepsy and for the prophylaxis of migraine. A recent Nordic-registry based cohort study (Bjork et al., 2022) which included 24,825 children who were exposed in utero to at least one ASM, among which 471 were exposed to topiramate monotherapy, showed an increased risk of autism spectrum disorders (ASD) and intellectual disability (ID).

In particular, the 8 year cumulative incidence of ASD and ID was 1.5% and 0.8% in children of women with epilepsy not exposed to ASM and 4.3% and 3.1% in children prenatally exposed to topiramate monotherapy.
This new information on neurodevelopmental risk, should be weighed in addition to existing warnings for use of topiramate in women of childbearing potential, including increased risk of major congenital malformation, small for gestational age and low birth weight. Following publication of these data, the HPRA and the EMA's Pharmacovigilance Risk Assessment Committee (PRAC), are undertaking a safety review into topiramate prenatal exposure and risk of neurodevelopmental disorders.

Healthcare professionals are reminded of the following:

- Topiramate is contraindicated as migraine prophylaxis in pregnant women and women of childbearing potential not using effective contraception;
- Women of childbearing potential treated with topiramate for epilepsy should be considered for alternative ASM treatments under specialist advice (sudden discontinuation should be avoided, this can lead to uncontrolled seizures).
- Pregnancy testing is recommended before initiation of topiramate and highly effective contraceptive methods are advised.
- The patients should be fully informed of the risks related to use in pregnancy, and, if planning a pregnancy, referred for preconception advice.

GPs can refer women on topiramate, or on other ASMs, to the Maternal Medicine Epilepsy Clinic at The National Maternity Hospital for preconception advice. The fortnightly clinic, also available via telehealth, is run by an epilepsy advanced nurse practitioner.

Infliximab use in pregnancy and lactation and infant live vaccine - written by Benedetta Soldati

A recent systematic review (Goulden, 2022), identified 5 cases of fatalities following BCG injection in infants exposed to biologic DMARDs (3 exposed to infliximab, 1 to adalimumab and 1 to another TNF-alpha inhibitor, not specified). This raised the concert that maternal use of bDMARDs (especially infliximab) during pregnancy and breastfeeding could result in immunosuppression in the newborn and increased the risk of infection, particularly after live vaccines.

Continued on next page

Two live vaccine are routinely administered in Ireland: rotavirus vaccine (at 2 and 4 months of age) and MMR vaccine (at 12 months of age). While only 7 mild reactions (in a cohort of 46 infants) were identified following rotavirus administration in infants in utero exposed to bDMARDs (6 after infliximab exposure and 1 after adalimumab exposure); the marketing authorisation holder of infliximab, together with the HPRA, EMA and NIAC, have specified that live vaccines should not be given to infants after in utero exposure to infliximab for 12 months after birth, or while breastfeeding.

Since the administration of rotavirus is not recommended after 8 months of life, due to the risk of intussusception, infants of mothers receiving infliximab during pregnancy or breastfeeding, should not receive the rotavirus vaccine. Considerations may be given to administration of rotavirus vaccines if maternal use of infliximab was limited to the 1st trimester in a non-breastfed infant. This safety update does not impact the administration of MMR vaccine, which is given at 12 months of life, nor the use of non-live vaccines, that can be administered as per the recommended schedule.

If you are interested in joining our GP Liaison Committee, which meets quarterly, please email our NMH Quality Manager, Rachel Irwin rirwin@nmh.ie

Thank you

Cariban – *written by David Fitzgerald, Chief Pharmacist*

- Cariban (Doxylamine 10mg/Pyridoxine 10mg) has been used in The NMH as the first line anti-emetic for Nausea and Vomiting in Pregnancy (NVP) and Hyperemesis Gravidarum (HG) since 2015.
- Given at a dose of one capsule in the morning, one at lunchtime and two at bedtime, Cariban is highly effective at preventing admissions for rehydration therapy. It is also one of the most extensively studied antiemetics with regard to safety in pregnancy.
- However, Cariban is a high cost medication, costing patients as much as €1000 to €3000 over the course of a pregnancy.
- From January 2023, it is anticipated that Cariban will be reimbursed on the community drugs schemes (GMS, DPS).
- At present, the Department of Health have recommended that in order to be reimbursed, it must be prescribed by a consultant obstetrician.
- It is hoped that the DoH will put in place clinical pathways to facilitate reimbursement based on prescriptions from GPs.

Oral Thrush in Newborns – *written by Montserrat Corderroura Neonatology Pharmacist*

- Oral thrush in newborns is an oropharyngeal candidiasis.
- Breastfed babies and their mothers can pass it to each other. It is important to treat both mother and baby. If a breastfed baby has oral thrush but the mother has no symptoms, both should be treated and vice versa.
- Soothers and feeding equipment need to be cleaned/sterilised regularly.
- Hand-hygiene should be observed before any feeds and while caring for the baby.
- The following treatments are to be administered/applied after feeds.

	Age	Dose	Comments
NYSTATIN (Mycostatin® 100,000 units/ml Ready Mixed Oral Suspension)	Newborn-1month	1 ml TDS (7 days) *Dose as per SPC*	• Administer after feeds. • Continue for 48 hours after symptoms have cleared. • Re-evaluate if symptoms persist after 14 days of treatment.
	1 month–2 years	1 ml-2 ml QDS (7 days) *Dose as per SPC*	
MICONAZOLE* (Daktarin® 20 mg/g oral gel) * *Unlicensed in babies under 4 months of age*	Newborn-1 month	1 ml QDS	• Apply the gel in small portions with a clean finger to affected areas. • Continue for 7 days after symptoms have disappeared.
	1 month–2 years	1.25 ml QDS	

Paracetamol Suppositories for Infants and Children – *written by Montserrat Corderroura*

Paracetamol is one of the most common medicines involved in poisoning enquiries made to the National Poisons Information Centre. The potential risks may be underappreciated due to its regular use, ease of availability and multiple products with different dosage forms in the market. Suppositories are useful when babies/children are unable to take oral forms of paracetamol (e.g. difficulty swallowing, nausea/vomiting). Dosage should be based on the child's weight (15mg/kg recommended dose). This dose may be repeated up to a maximum of four times in 24 hours and not more frequently than every 4 hours (some preparations, depending on age/weight may be twice daily dosing). * Refer to specific SPC for dosing guidelines. Take great care when calculating the weight-based dose of paracetamol in infants/children, as a higher than recommended dose can rapidly lead to toxicity. The use of paracetamol suppositories should not be combined with other medications containing paracetamol.

Licensed presentations in Ireland of paracetamol suppositories for babies/children comprise the following doses: 75 mg, 80 mg, 125 mg, 180 mg and 250 mg.
Unlicensed presentations: 30 mg and 60 mg.

Maternal Newborn Clinical Management System (MN-CMS) Antenatal Shared Care Messaging - written by Áine Toher Informatics/Medication Safety Pharmacist

A new enhancement to the MN-CMS will allow medications prescribed by a patient's GP to be automatically sent via Healthlink using Antenatal Visit Shared Care Messaging. The process will start when the patient attends hospital for an antenatal booking visit

- With the patient's consent, an electronic Antenatal visit Shared Care Message is sent to the GP via HealthLink as is current practice
- Once the patient attends the GP for their next Antenatal Visit (shared care) the electronic message that the GP sends back into MN-CMS will automatically include any medications that have been prescribed for that patient within the last 12 month
- As the pregnancy progresses, the medications list will be updated to include any new medications prescribed by the GP
- The medication details will include the date of issue, drug name, dose, dose unit, drug form, frequency, quantity and number of repeats in chronological order

Medication History - "Know, Check, Ask" - written by Áine Toher

- Patients need to know about their OWN medications including prescribed, over-the-counter, supplements as well as any herbal & homeopathic preparations in order to avoid possible problems or errors.
- A good way to keep track is for patients to create a personalised medication record and keep it up-to-date.
- This is a very important 1st step on the road to improving medication safety and applies to everyone who takes medication or looks after /administers medication to another person in their care.
- The National Medication Safety Programme (safer meds): www.safermeds.ie promote the WHO 'Know Check Ask' campaign for people who use medicines and their families.