

In this issue:

- Electronic medicines reconciliation
- New BNF app
- Reminder - Gentamicin
- Reminder - Vancomycin
- Guideline news
- Review of *PostScript* bulletins

Information included is specific to the use of medicines in the **adult** setting.

1. Electronic Medicines Reconciliation (eMR)

An accurate medication history is essential for making safe & effective treatment decisions, and to ensure medicines are not incorrectly prescribed or unintentionally omitted. Medicines Reconciliation (MR) is a structured approach to taking a medication history which aims to establish an up to date and accurate list of medicines being taken by the patient on admission and record whether medicines are to continue, stop or be withheld.

NHS GGC has now introduced an electronic Medicines Reconciliation (eMR) form to aid the MR process.

Key points to know about the eMR

- The eMR links directly to the medicines and allergy information in the emergency care summary (ECS) and pulls this information into the form for the prescriber to check and edit as required. **MR involves checking 2 medicines information sources.** Additional medicines information from a second source can be added to the form.
- The eMR aims to improve process efficiency and reduce the risk of transcription errors. It can be used for all in-patients and clinical teams should incorporate eMR into their clerk-in process.
- Completed eMR forms are saved in the clinical portal. A hard copy can be printed off, if required,

to facilitate local workflow. The completed eMR is an important source of information for reconciling medicines at discharge and completing the Immediate Discharge Letter (IDL).

- Work is underway to explore the feasibility of linking completed eMR forms with the TrakCare IDL to improve medicines reconciliation at discharge.

eMR

Access via IT helpdesk
(#650)

Request to be added
to the 'eForms Group'
within Clinical Portal

- Further information is available by clicking on [eMR](#).

2. BNF smartphone apps

The NICE BNF and BNFC (British National Formulary for Children) smartphone applications are now available for download by healthcare professionals. [Click here](#) for further information.



3. Reminder: How to Prescribe & Administer Gentamicin

The new NHSGGC gentamicin prescription, administration and monitoring chart has been in use since August 2012. Audit of in use gentamicin charts and a review of the August to October 2012 medication incident data illustrate a few cases where there was an apparent deviation from the agreed processes for prescribing gentamicin. Further

educational sessions are planned for all healthcare professionals involved in the use of gentamicin early 2013. In the meantime, here is a reminder of key practice points for medical and nursing staff.

Please continue to report all incidents and near misses on Datix.

Medical Staff

Parenteral Drugs : Regular Prescription

DRUG GENTAMICIN

DOSE AS PER CHART

ROUTE IV

DATE 01/08/12

DATE:

PRESCRIBER (PRINT & SIGN) B Fixem

INITIALS:

STOPPED

ADDITIONAL INSTRUCTIONS / COMMENTS / PHARMACY

SEE GENTAMICIN PRESCRIBING CHART

Prescribe 'as per chart': DO NOT specify a dose on the kardex

Remember to discontinue gentamicin on BOTH the kardex and the chart when the course is complete

Leave the dose time blank on the kardex

Dose and dose time will be on the separate gentamicin prescription chart & may vary – see below

ADULT PARENTERAL GENTAMICIN (GGC): PRESCRIBING, ADMINISTRATION & MONITORING CHART

Use for all patients prescribed intravenous gentamicin unless prophylactic (e.g. before surgery) or synergistic doses (usually in endocarditis) are being used.

Patient name: **Age:** 65 **Sex:** M / F **Initial Gentamicin Dose*:** 320 mg ***this is not a prescription and may change. Doses must be prescribed individually below.**

Weight: 68 kg **Height:** 5' 7" **Predicted Frequency*:** 24 hourly

Date of birth: **Creatinine:** 68 **on:** 01 / 08 / 12

CHI no.: **Source of first dose:** Online calculator (preferred method) ☒ Manual calculation ☐ Weight based, creatinine not known ☐

Step 1: Calculate and prescribe the first dose of gentamicin (see overleaf for more details)

• If creatinine is known - use the online gentamicin dose calculator.

• If creatinine is not known - give 5 mg/kg gentamicin (maximum 400 mg) or, if GFR < 30, give 2.5 mg/kg (maximum 180 mg) on advice of senior medical staff

• Prescribe gentamicin

• Prescribe individual

Step 2: Monitor creatinine

• Check gentamicin

• Monitor creatinine daily. Seek advice if renal function is unstable (e.g. a change in creatinine of >15-20%).

Step 3: Assess daily: the ongoing

• Consider an alternative agent if

• If gentamicin continues for >7 days

• Refer to guidelines or clinical phar

PROMPT ADMINISTRATION

within 1 hour of recognition of sepsis reduces mortality

SIGNS OF GENTAMICIN TOXICITY

RENAL: ↓ urine output/oliguria or ↑ creatinine

OTO: NEW tinnitus, dizziness, poor balance,

VESTIBULAR: hearing loss, oscillating vision

Toxicities may occur irrespective of gentamicin concentration

Document: the source of first dose, the parameters used and the dose obtained

Record gentamicin sample times ALWAYS document the action taken

Prescribe each dose individually, NOT usually >24 h in advance.

CHECK kardex in case it has been discontinued BEFORE prescribing

3. Reminder: How to Prescribe & Administer Gentamicin (cont'd)

Nursing Staff

Parenteral Drugs : Regular Prescription				
BEFORE ADMISSION	A	DRUG	GENTAMICIN	
DOSE	AS PER CHART	ROUTE	IV	DATE: 01/08/12
PRESCRIBER (PRINT & SIGN)	B Fixem		STOPPED	INITIALS:
ADDITIONAL INSTRUCTIONS / COMMENTS / PHARMACY				
SEE GENTAMICIN PRESCRIBING CHART				

Other time: 0700-0900, 1200-1400, 1800-1800, 2200-2400, Other time

LS 17:08

Gentamicin will be prescribed 'as per chart':
 The dose should NOT be on the kardex
 The prescriber will leave the dose time blank

Nursing Staff MUST:
 - sign the kardex AND the gentamicin chart
 - document the time of administration on the kardex AND the gentamicin chart

Dose and dose time will be prescribed on the separate gentamicin prescription chart & may vary - see below

ADULT PARENTERAL GENTAMICIN (GGC): PRESCRIBING, ADMINISTRATION & MONITORING CHART									
Use for all patients prescribed intravenous gentamicin unless prophylactic indication or synergistic doses (usually in endocarditis) are being used									
Patient name:		Age: 65		Sex: M / F		Initial Gentamicin Dose*: 320 mg		*this is not a prescription and may change. Doses must be prescribed individually below.	
Date of birth:		Weight: 68 kg		Height: 5' 7"		Predicted Frequency*: 24 hourly			
CHI no.:		Creatinine: 68		on: 01 / 08 / 12					
Source of first dose: Online calculator (preferred method) <input checked="" type="checkbox"/> Manual calculation <input type="checkbox"/> Weight based, creatinine not known <input type="checkbox"/>									
Step 1: Calculate and prescribe the first dose of gentamicin (see overleaf for more details) <ul style="list-style-type: none"> If creatinine is known - use the online gentamicin dose calculator. If creatinine is not known - give 5 mg/kg gentamicin (maximum 400 mg) or, if CKD 5, give 2.5 mg/kg (maximum 180 mg) on advice of senior medical staff Prescribe gentamicin 'as per chart' on the medication chart (kardex). AVOID specifying dose or administration time on the kardex. Prescribe individual doses in the prescription record section below, specifying the date and time the dose should be given. 									
Step 2: Monitor creatinine and gentamicin concentration and reassess the dosage regimen <ul style="list-style-type: none"> Check gentamicin concentration after the first dose and then at least every 2 days (see overleaf for more details). Monitor creatinine daily. Seek advice if renal function is unstable (e.g. a change in creatinine of >15-20%). 									
Step 3: Assess daily: the ongoing <ul style="list-style-type: none"> Consider an alternative agent if cr If gentamicin continues for >7 day Refer to guidelines or clinical phar 									
PROMPT ADMINISTRATION within 1 hour of recognition of sepsis reduces mortality									
SIGNS OF GENTAMICIN TOXICITY RENAL: ↓ urine output/oliguria or ↑ creatinine OTO: NEW tinnitus, dizziness, poor balance, VESTIBULAR hearing loss, oscillating vision Toxicities may occur irrespective of gentamicin concentration									
Pre-prescribing checks		Gentamicin Prescription Record				Administration Record			
Toxicity assessments		Complete each time a dose is given (ensuring gentamicin is prescribed 'as per chart' on the kardex)				Complete each time gentamicin is administered (in addition to the kardex)			
Date to be given		Time to be given		Gentamicin Dose (mg)		Prescriber's signature and PRINTED name		*Infuse over 30 mins*	
Before prescribing:		01/08 17:00		320 mg		B Fixem B FIFEM FY1		Date given: 01/08 17:08	
Check renal and oto/vestibular function		02/08 17:00		320 mg		B Fixem B FIFEM FY1		Given by: LS AP	
								Record ALL sample dates/times accurately below. See overleaf for monitoring advice.	
								Date of sample: 02/08 07:34	
								Time of sample: 07:34	
								Gent level (mg/L): 1.6	
								Action/ Comments (please initial action to be taken)	
								24 hourly <input checked="" type="checkbox"/> 48 hourly <input type="checkbox"/> Withhold <input type="checkbox"/> Stop <input type="checkbox"/>	
								Details/other: No dose change BF	
								24 hourly <input type="checkbox"/> 48 hourly <input type="checkbox"/> Withhold <input type="checkbox"/> Stop <input type="checkbox"/>	
Each patient's dose and frequency may be different – some will be every 24 hours, others will be every 48 hours. CHECK date & time BEFORE administration CHECK kardex BEFORE administration in case it has been discontinued									

4. Reminder: Vancomycin

A new national chart for the prescribing, administration and monitoring of vancomycin is expected this year. In the meantime, **existing arrangements remain:**

In **Glasgow** hospitals

- vancomycin should be prescribed on the kardex with dose and dose frequency information. It should NOT be prescribed 'as per chart'.
- the separate monitoring chart is **ONLY** to be used to record administration and vancomycin blood concentrations. Dose changes **MUST** be made on the kardex as the chart is **NOT** a prescription.

In **Clyde** hospitals

- vancomycin should be prescribed on the kardex 'as per chart'.
- the current vancomycin prescription, administration and monitoring chart remains in use.

If you have any questions, please contact a member of the antimicrobial pharmacy team (contact details available on page 338 of the Therapeutics Handbook)

5. Guideline news

SIGN & NICE clinical guidelines and GGC guidelines approved by the Medicines Utilisation & Prescriber Education subgroup of the ADTC, since October 2012 are highlighted:

NHSGGC Acute Care Guidelines
Prescribing guidance for the use of dexmedetomidine
Treatment of macular oedema secondary to central retinal vein occlusion using ranibizumab
SIGN Clinical Guidelines
No new guidelines since October 2012
NICE Clinical Guidelines
Psoriasis (CG 153)
Ectopic pregnancy and miscarriage (CG 154)

6. Review of *PostScript* Bulletins

PostScript Acute is one of 4 *PostScript* bulletins of relevance to the acute sector.



Following a review of the dissemination of key drug safety messages in NHSGGC, junior doctor feedback questioned the need for all the different bulletins.

"...So there is PostScript Acute, PostScript Safety, PostScript and PostScript Extra? That's a lot." (FY1)

"Do you think it is necessary to have all four?" (FY1)

In response, *PostScript Safety* will no longer exist as a separate bulletin. Safety messages will be strengthened within the remaining *PostScript Family* targeted at the most relevant publication.

The publication schedule for *PostScript* (covering clinical topics for all sectors of the NHS) and *Postscript Acute* (addressing prescribing and clinical issues specific to the acute sector) has been altered. These will be published bimonthly on the first Monday of alternate months. *PostScript Extra* (summary of evidence base for specific medicines) will continue to be produced on an ad-hoc basis.

View all *PostScript* publications at
www.ggcprescribing.org.uk

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by sending an email to
postscript@ggc.scot.nhs.uk