

# Patient Safety Matters



PROMOTING A CULTURE OF SAFETY AND QUALITY AMONGST JUNIOR DOCTORS

ISSUE 18 – September 2017

## Is your patient at risk of

**32%** of people aged 65 years or over are at risk of malnutrition on admission<sup>2</sup> to hospital

Malnourished people:

See their GP twice as often

Have 3 times the number of hospital admissions

Stay in hospital more than 3 days longer than those who were well nourished<sup>3</sup>

## Malnutrition?

Defined as<sup>1</sup>:

A body mass index (BMI) of less than 18.5 kg/m<sup>2</sup>

Unintentional weight loss >10% in the last 3-6 months

BMI of <20 kg/m<sup>2</sup> and unintentional weight loss greater than 5% within the past 3-6 months

Imagine you are working on a Saturday morning – there are no dietitians until Monday and you come across one of the following:

- 1) A patient fed exclusively by PEG and NBM has been admitted. No feeding regime has been provided by the care home, what should you do?  
**Check out the >> [Out of Hours Gastric Enteral Feeding Regime \(Adults Only\)](#)**
- 2) A 40 year old patient with Eating Disorder and BMI of 12.5 has been admitted under orthopaedics with a fractured hip. How should she be safely nourished such that the risk of refeeding syndrome is minimised?  
**Check out the >> [MARSIPAN Guidelines](#)** (which reference the relevant refeeding protocols, etc)
- 3) A patient with short bowel syndrome due to Crohn's disease who is on home parenteral nutrition is admitted with a buttock abscess. How should their feeding be managed in the acute situation?  
**Check out the >> [Home Parenteral Nutrition Patients admitted acutely, Management of](#)**

A wealth of guidance and tools on nutrition are available on Staff Room – open a browser window and select 'Clinical Information' and then 'Nutrition & Hydration'. Alternatively follow this [link](#). The 'Nutrition Policy' document contains links to relevant guidelines/policies.

Contact the dietitian team during working hours for support York 772 5269 and Scarborough 771 2415.

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<sup>1</sup> "Nutrition Support for Adults," Section 1.3, NICE guidelines, Feb 2006, <https://www.nice.org.uk/guidance/cg32/chapter/guidance>

<sup>2</sup> "Nutrition screening surveys in hospitals in the UK, 2007-2011," BAPEN, accessed April 2015, <http://www.bapen.org.uk/pdfs/nsw/bapen-nsw-uk.pdf>, p.41

<sup>3</sup> Guest, J. F. et al (2011) 'Health economic impact of managing patients following a community-based diagnosis of malnutrition in the UK', *Clinical Nutrition*, Volume 30, Issue 4, Pages 422-429, August 2011

## Royal College of Physicians prescribing support for junior doctors

The Royal College of Physicians (RCP) has released '*Supporting junior doctors in safe prescribing*', a new guide for supporting junior doctors when prescribing in hospitals. The resource calls for the provision of more practical and interactive prescribing training for junior doctors to help reduce errors, as well as greater support from hospital trusts to create safer working environments for junior doctors to prescribe.

The document can be viewed by visiting;

<https://www.rcplondon.ac.uk/news/rcp-releases-prescribing-support-junior-doctors>



## Safe Prescribing Audit

Medication errors have become a significant patient safety concern in recent years and have been shown to account for up to 7,000 deaths per year<sup>(1)</sup>. Unclear prescribing contributes to medication errors<sup>2</sup>. A Trust audit was undertaken to determine whether inpatient prescriptions conform to the prescribing standards outlined in the Trust medicines code<sup>3</sup>. This snap shot audit included the evaluation of 1,825 prescribed items across the Trust and off site Units. Five charts were evaluated from each ward with the exception of SCBU-Scarborough where 2 charts were reviewed.

### Some findings from the audit

98.8%

of drug names legible

98%

Route made clear

92%

Generic drug names used\*

98.4%

Doses clear

96%

Dose units not abbreviated

\*Prescribe using the current BNF recommended generic name. The exceptions when brand name should be used are:

- Drugs with a narrow therapeutic margin where differences in bioavailability exist between different products (e.g. lithium, theophylline, tacrolimus, ciclosporin, phenytoin, carbamazepine and valproate).
- Where the BNF recommends prescribing drugs by brand name because they are modified release (e.g. nifedipine, diltiazem).
- Combinations of drugs where there is no generic name.
- Insulins (these should also include the device name).
- Dressings
- Biosimilars  
(<https://www.nice.org.uk/guidance/ktt15/resources/biosimilar-medicines-58757954414533>)
- Inhalers

**The overall message is that generally our prescriptions are clear and accurate. There is, of course, always room for improvement.**

**Prescribers should write clearly in permanent indelible ink and each individual letter must be clear.** Unclear prescriptions should be re-written before the drug can be administered.

The use of **dose unit abbreviations must be avoided** as this can result in patients being administered an inappropriate dose leading to patient harm. **Examples include 'mcg' instead of 'micrograms' or 'u' instead of 'units'.**

A number of prescribed items did not have the **prescribers identity** documented. **It is a legal requirement that all prescriptions be signed in indelible ink by the prescriber**<sup>(4,5,6,7)</sup>. Prescriber details helps the nursing staff know who to contact if there are any issues relating to the prescribed medicine.

The audit also highlighted a number of prescribed items on the PRN section of the drug chart that did not have the **administration frequency** indicated. **Clearly documenting frequency is very important** so that patients are not administered an unintended total excessive dose within 24 hours.

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**References:** 1. USP Medication safety Forum-The impact of abbreviations on patient safety, Vol 33, No.9 (2007)., 2. Safety in doses: medication safety incidents in the NHS 2007. 3. Medicines Code (2016)., 4. Misuse of Drugs Regulations 2001., 5. Medicines, Ethics and Practice 35th Edition, July 2016., 6. Pharmacy Law and Ethics- The Human Medicines Regulations 2012., 7. British National Formulary 71 March 2016.

## Local Anaesthetic Systemic Toxicity

Local Anaesthetics (LAs) are drugs that temporarily block the pain sensation in nerves, allowing surgery to be performed without the need for a general anaesthetic. The trust routinely performs many LA procedures in many different departments across all 3 sites.

LA drugs are very safe, however there is a very small risk of them causing '**Local Anaesthetic Systemic Toxicity**' (LAST) which can be very dangerous if not managed correctly.

LAST occurs when larger doses of local anaesthetics are used. Symptoms include **tingling in the lips, dizziness, agitation, convulsions** and **loss of consciousness**, as well as **abnormal heart rhythms**. These features can develop some time after local anaesthetics have been administered, so vigilance on wards and in recovery areas is important. Following a review of practice within the trust, we hope to promote awareness of LAST amongst members of staff, including how to prevent it, recognise it and manage it.

In terms of prevention, we have distributed LA safe dosing charts throughout all sites so that weight-related safe doses of LAs can easily be looked up. The charts are also on the reverse of the operating theatre team brief sheet so are present for every theatre list.

We are developing an eLearning package that will be available for everyone who uses LA or is involved in the treatment of LAST.

We are taking steps to discontinue one of the more risky LAs – Bupivacaine, and swap to the safer alternative – Levobupivacaine.

We have compiled and distributed Local Anaesthetic Toxicity grab bags throughout the Trust. These contain the antidote medicine "**Intralipid**" and instructions on how to administer it. A key component of the treatment of LAST is rapid administration of large volumes of Intralipid so please ensure that you are aware of where your nearest grab bag is kept. These are currently located:

- YDH – Main theatre PACU, Day Unit PACU, Emergency Dept.
- Resus, Maternity and Vascular Imaging Unit
- SGH – Main theatres, Maternity, Emergency Department
- BDH – Main theatre, Shepherd Theatre, Vanguard Theatre



LAST Grab Bag

### Maximum Recommended Local Anaesthetic Doses (for Adults)

These are recommended maximum safe doses of Local Anaesthetics (LAs). Where the recommended maximum dose of one LA has been given, do not give any further LA. Remain vigilant for the signs of Local Anaesthetic Systemic Toxicity. For further information please see Trust SOP on Local Anaesthetics

| DRUG                                    | Concentration (mg/ml) | Maximum Safe Dose | MAXIMUM VOLUME (mls) |      |       |      |       |      |       |      |       |
|-----------------------------------------|-----------------------|-------------------|----------------------|------|-------|------|-------|------|-------|------|-------|
|                                         |                       |                   | 35kg                 | 40kg | 45kg  | 50kg | 55kg  | 60kg | 65kg  | 70kg | 75kg+ |
| 0.25% Levobupivacaine or Bupivacaine    | 2.5                   | 2mg/kg            | 28                   | 32   | 36    | 40   | 44    | 48   | 52    | 56   | 60    |
|                                         |                       |                   | 14                   | 16   | 18    | 20   | 22    | 24   | 26    | 28   | 30    |
| 1% Lidocaine                            | 10                    | 3mg/kg            | 10.5                 | 12   | 13.5  | 15   | 16.5  | 18   | 19.5  | 20   | 20    |
| 2% Lidocaine                            | 20                    |                   | 5.2                  | 6    | 6.75  | 7.5  | 8.25  | 9    | 9.75  | 10   | 10    |
| 1% Lidocaine with 1:200 000 Epinephrine | 10                    | 7mg/kg            | 24.5                 | 28   | 31.5  | 35   | 38.5  | 42   | 45.5  | 49   | 50    |
| 2% Lidocaine with 1:200 000 Epinephrine | 20                    |                   | 12.25                | 14   | 15.75 | 17.5 | 19.25 | 21   | 22.75 | 24.5 | 25    |
| 1% Prilocaine                           | 10                    | 6mg/kg            | 21                   | 24   | 27    | 30   | 33    | 36   | 39    | 40   | 40    |

Alexander Bell, *SPR Anaesthetics* & Andrew Pollard, *Consultant Anaesthetics*

If you or your department is interested in LAST or requires further information/training then please contact [Andrew.pollard@york.nhs.uk](mailto:Andrew.pollard@york.nhs.uk) or [Alexander.bell@york.nhs.uk](mailto:Alexander.bell@york.nhs.uk)

## Vancomycin IV guide

**RESTRICTED USE** This is a restricted antibiotic and should be prescribed in accordance with the Antimicrobial Prescribing Guidelines or on a Consultant Microbiologists recommendation.

The Trust Vancomycin IV guide has recently been updated and is available on Staffroom;

<http://staffroom.ydh.yha.com/policies-and-procedures/clinical/pharmacy/iv-monographs/vancomycin-iv-monograph/view>

Check out the [[Vancomycin IV Guide](#)] for detailed information but here is an overview:

- 1) **Loading Dose** - Based on actual body weight
- 2) **Maintenance dose** - Give first maintenance dose 12 or 24 hours after loading dose dependant on eGFR.
- 3) **Monitoring**
  - **Vancomycin** - The maintenance dose should be reviewed and adjusted according to the first trough level – see full guideline for when to take. Thereafter monitor Vancomycin level every 2-3 days, or daily if unstable renal function. **This is all in the IV Guide no need to commit to memory.**
  - **Renal function** - Monitor throughout treatment with Vancomycin.

**For patients on haemodialysis or peritoneal dialysis – see separate administration prescription.  
Don't forget to ask a friendly pharmacist for help!**

William Lea, *Clinical Leadership Fellow*

for info please contact Paul Jackson, [Paul.Jackson@york.nhs.uk](mailto:Paul.Jackson@york.nhs.uk)

## Junior Doctors Safety Improvement Group

Greetings from the Junior Doctor Safety Improvement Group, I would like to introduce myself as the new Chair and thank Becky for her hard work leading the group over the last year. The Vice Chair for the year is Amelia Bearn who is working at Scarborough Hospital whilst I am based in York.

The group aims to give junior doctors (FY1-Registrar) a voice in highlighting, as well as addressing, matters relating to patient safety.

In addition, we send a representative from the group to a variety of Trust meetings such as Infection Prevention Steering Group, Venous Thromboembolism group and Deteriorating Patient Group to name a few. This will allow you to lend a voice to you and your peers at a senior decision making level and report back any learning to us.

We aim to meet monthly in a video-linked conference call between the hospital sites. The group has the support and guidance from senior clinicians and managers. You will often find Diane Palmer (Deputy Director for Patient Safety) and Jim Taylor (Medical Director) in attendance.

It is an excellent opportunity for you to make your voice heard and channel your desire to improve patient care. I encourage you all to attend. Details of dates and times are circulated by email.

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