University Hospitals of Derby and Burton NHS Foundation Trust

PATIENT GROUP DIRECTION (PGD)

Administration of COMPOUND SODIUM LACTATE (HARTMANN'S) INFUSION
By Registered Practitioners providing care to patients in the fractured NOF pathway at UHDB

Documentation details

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Change history

Version number	Change details	Date
	No Change	07/05/2021
No 2	No Change	11/07/24

Glossary

Abbreviation	Definition

1. PGD template development (PGD Working Group)

PGD Working Group Membership (minimum requirement of consultant, pharmacist and a registered professional who can work under a PGD (or manages the staff who do). If this is a review of existing PGD, replace previous names with the individuals involved for this version

Name	Designation
Lynsey Heald	Matron
Lydia Atia	Senior Clinical Pharmacist
Steve Milner	Consultant

Where an antimicrobial is included, confirm the name, designation and date of the antimicrobial pharmacist who has reviewed this version

Name of antimicrobial pharmacist	Designation	Date Reviewed

2. Organisational authorisations

The PGD is not legally valid until it has had the relevant organisational authorisation.

University Hospitals of Derby & Burton NHS Foundation Trust authorises this PGD for use by the services or providers listed below:

Authorised for use by the following organisation and/or services
Pre operative care of fractured neck of femur patients at UHDB
Limitations to authorisation
NA

Organisational Authorisation (legal requirement).			
Role	**Name**	**Sign**	**Date**
Medicines Safety Officer *Pharmacist: Medicines Safety Officer, Chief Pharmacist or assigned deputies)*	James Hooley	**Signed copy held by Pharmacy**	18/09/2024

Additional signatories (required as per legislation and locally agreed policy)			
Role	**Name**	**Sign**	**Date**
Advanced Pharmacist – T&O *Clinical Pharmacist from PGD working group*	**Lydia Atia**	**Signed copy held by Pharmacy**	**12/09/2024**
Consultant – T&O *Doctor*	**Steve Milner**	**Signed copy held by Pharmacy**	**17/09/2024**
Matron – T&O *Registered Professional representing users of the PGD*	**Lynsey Heald**	**Signed copy held by Pharmacy**	**13/09/2024**

Local enquiries regarding the use of this PGD may be directed to UHDB.PGDgovernance@nhs.net

Section 7 provides a registered health professional authorisation sheet. Individual professionals must be authorised by name to work to this PGD.

3. Characteristics of staff

Qualifications and professional registration	Registered professional with current professional registration operating within their usual scope of practice. Must be a profession permitted by current legislation to practice under a patient group direction.
Initial training	- Completion of all Essential-to-role training as outlined in the UHDB PGD policy. - Individual has read and understood full content of this PGD and signed authorisation (section 7) - Completion of Medicines Management Drug Assessment - Infusion Therapy study day - Completed Infusion therapy competency
Competency assessment	Staff operating under this PGD are encouraged to review their competency using the NICE Competency Framework for health professionals using patient group directions Individuals operating under this PGD are personally responsible for ensuring they remain up to date with the use of all medicines included in the PGD - if any training needs are identified these should be discussed with the either authorising manager (section 7) or the manager within the PGD working group (section 1) so that further training can be provided as required. Has undertaken appropriate training to carry out clinical assessment of patient leading to diagnosis that requires treatment according to the indications listed in the PGD Has undertaken appropriate training for working under Patient Group Directions for the supply and administration of medicines.
Ongoing training and competency	• It is the responsibility of the individual registered nurse to remain updated, with evidence of continued professional development • Attends 3 yearly IV update • Performance reviews. • Attend mandatory CPR/AED/anaphylaxis yearly updates
The decision to supply any medication rests with the individual registered health professional who must abide by the PGD and any associated organisation policies.	

4. Clinical condition or situation to which this PGD applies

Clinical condition or situation to which this PGD applies	Patients with a fractured neck of femur for pre operative fluid replacement until reviewed by a doctor
Criteria for inclusion	• Patients over 16 years presenting with the above
Criteria for exclusion	• Previous sensitivity or intolerance to the drug or any ingredient; • Children under 16 years old; patients with heart failure, • Oedema, • Hypertension or hypervolaemia • Aldosteronism Severe renal insufficiency (with oliguria/anuria) • Uncompensated cardiac failure • Hyperkalaemia • Hypercalcaemia • Metabolic alkalosis • Ascitic cirrhosis • Severe metabolic acidosis • Conditions associated with increased lactate levels (hyperlactataemia) including lactic acidosis, or impaired lactate utilization, such as severe hepatic insufficiency. • Pregnant patients; • Undiagnosed medical symptoms; • Reservations/concerns by patient about side effects of the treatment.
Cautions including any relevant action to be taken	Hypersensitivity reactions • The infusion must be stopped immediately if any signs or symptoms of a suspected hypersensitivity reaction develop Hypernatraemia • Compound Sodium Lactate solution should only be administered to patients with hypernatraemia after careful consideration of the underlying cause and alternative intravenous fluids. Use in patients with type 2 diabetes • Lactate is a substrate for gluconeogenesis. Therefore, glucose levels should be carefully monitored in this patient group. Use in patients with renal impairment • Compound Sodium Lactate solution should be administered with particular caution to patients with renal impairment (and see exclusions related to severe renal impairment). Overdose • An excessive volume or too high a rate of administration of Compound Sodium Lactate solution may lead to fluid and sodium overload with a risk of oedema

Action to be taken if the patient is excluded	• Record reasons for exclusion in patient notes • Advise patient on alternative treatment • Refer to medical team
Action to be taken if the patient or carer declines treatment	• Document advice given • Advise patient on alternative treatment • Refer to medical team
Arrangements for referral for medical advice	• Refer to medical team

5. Description of treatment

Name, strength & formulation of drug	Compound Sodium Lactate Solution (Hartmann's) for Infusion
Legal category	Prescription-Only Medicine (POM).
Route / method of administration	Intravenous
Indicate any off-label use (if relevant)	NA
Dose and frequency of administration	• One 1000ml bag to be administered over 12 hours until Medical review
Duration of treatment	One dose as a PGD then medical review for consideration of further doses.
Quantity to be supplied (leave blank if PGD is administration ONLY)	*n/a*
Storage	Stock must be securely stored according to UHDB medicines policy and in conditions in line with SPC as detailed below: Stored at room temperature
Drug interactions	Drug interactions are primarily related to potassium, calcium and sodium content which may be additive to effects of other drugs which affect these electrolytes (e.g. ACE inhibitors or potassium sparing diuretics). These effects are minimised within this PGD by authorising only a single infusion over 12 hours. A detailed list of drug interactions is available in the SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk
Identification & management of adverse reactions	A detailed list of adverse reactions is available in the SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk
Management of and reporting procedure for adverse reactions	• Healthcare professionals and patients/carers are encouraged to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme on: https://yellowcard.mhra.gov.uk

	• Record all adverse drug reactions (ADRs) in the patient's medical record. • Serious adverse reactions (moderate harm or above as per NRLS definition) should be reported via trust incident management system (e.g. Datix) to ensure duty of candour and learning from harm during clinical use. •
Written information to be given to patient or carer	NA
Patient advice / follow up treatment	Report any side effects experienced to a health care professional
Records	Fluid chart, ED chart or ePMA system depending which prescribing system (for fluids) is in-use in your area. Either the system holding the record, or the healthcare practitioner working under the PGD, must capture/document all of the following: • name of individual, address, date of birth and GP with whom the individual is registered (if relevant) • name of registered health professional • name of medication supplied/administered • date of supply/administration • dose, form and route of supply/administration • quantity supplied/administered • batch number and expiry date (if applicable e.g. injections and implants) • advice given, including advice given if excluded or declines treatment • details of any adverse drug reactions and actions taken • Confirm whether supplied and/or administered via Patient Group Direction (PGD) Records should be signed and dated (or a password controlled e-records). All records should be clear, legible and contemporaneous. If you are not recording in ePMA (or other electronic system which has ability to generate audit reports) then a record of all individuals receiving treatment under this PGD should also be in the clinical area for audit purposes as per UHDB PGD policy.

6. Key references

Key references	• Electronic Medicines Compendium http://www.medicines.org.uk/ • Electronic BNF https://bnf.nice.org.uk/ • NICE Medicines practice guideline "Patient Group Directions" https://www.nice.org.uk/guidance/mpg2

7. Registered health professional authorisation sheet

PGD Name [version]: Hartmann's Solution for NOF [v2] PGD ref: UHDB107

Valid from: 18/09/2024 Expiry date: 17/09/2027

Before signing check that the document you have read is published on Koha or is an in-date hard-copy with all necessary authorisations signed in section 2. The Name/Version/Ref of the document you have read MUST match this authorisation form.

Registered health professional
By signing this patient group direction you are indicating that

a) You agree to and understand all content and commit to only work within this framework.
b) You have completed any core PGD e-Learning or training records on My Learning Passport or within your department.
c) You meet the staff characteristics and have completed any additional learning/competency outlined in Section 3 of this PGD.

Patient group directions do not remove inherent professional obligations or accountability.
It is the responsibility of each professional to practise only within the bounds of their own competence and professional code of conduct.

I confirm that I have read and understood the content of this Patient Group Direction and that I am willing and competent to work to it within my professional code of conduct.			
Name	**Designation**	**Signature**	**Date**

Authorising manager / Assessor

I confirm that the registered health professionals named above have declared themselves suitably trained and competent to work under this PGD. I give authorisation on behalf of University Hospitals of Derby & Burton NHS Foundation Trust for the above named health care professionals who have signed the PGD to work under it.			
Name	**Designation**	**Signature**	**Date**

Note to authorising manager

Score through unused rows in the list of registered health professionals to prevent additions post managerial authorisation.

This authorisation sheet must be retained by a manager in the clinical department where the PGD is in-use to serve as a record of those registered health professionals authorised to work under this PGD.