University Hospitals of Derby and Burton NHS Foundation Trust

PATIENT GROUP DIRECTION (PGD)

Administration of SODIUM CHLORIDE 0.9% (central & peripheral) by CVAD-trained registered nurses in paediatrics at UHDB

Documentation details

Reference no:	UHDB144
Version no:	2
Valid from:	03/02/2022
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Expiry date:	02/02/2025

Change history

Version number	Change details	Date
2	No changes to current PGD- review and renewal	23.12.21

Glossary

Abbreviation	Definition
PICC	Peripherally inserted Central Catheter
CVAD	Central venous access device.
IV	Intravenous

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
Natalie Parkin/ Nicky Brett	Specialist and lead specialist nurses KITE team
Susi Dumbleton	Advanced Pharmacist
Dr Gisela Robinson	Consultant Paediatrician

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
N/A		

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
This PGD applies to: • The KITE team Registered Nurses who have had their IV, ANTT and CVAD training and observational sign offs. • Inpatient Registered Nurses who have had their IV, ANTT and CVAD training and observational sign offs.
Limitations to authorisation
This PGD does not include Birmingham patients as their policy for flushing/ locking lines is different therefore to consult their own individual policy for this. Non-registered staff are prohibited to access CVADs

Organisational Authorisation (legal requirement).			
Role	**Name**	**Sign**	**Date**
Medicine safety officer *Pharmacist: Medicines Safety Officer, Chief Pharmacist or assigned deputies)*	James Hooley	Signed copy held by Pharmacy	03/02/2022

Additional signatories (required as per legislation and locally agreed policy)			
Role	**Name**	**Sign**	**Date**
Advanced Pharmacist *Clinical Pharmacist from PGD working group*	Susi Dumbleton	Signed copy held by Pharmacy	25/01/2022
Consultant Paediatrician *Doctor*	Dr Gisela Robinson	Signed copy held by Pharmacy	28/01/2022
Specialist nurse KITE team *Registered Professional representing users of the PGD*	Nicky Brett	Signed copy held by Pharmacy	28/01/2022

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 nurse to access CVADs the nurse must have completed: IV, ANTT and CVAD training packages,
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 - IV training package - CVAD package - ANTT training
Competency assessment	Direct observations of accessing CVADs, as per training package. 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 either authorising manager (section 7) or the manager within the PGD working group (section 1) so that further training can be provided as required.
Ongoing training and competency	Annual Medicines Safety Training (essential to role) Review/repeat initial training above when this PGD is revised. Staff have to attend their updates for IVs and CVADs and ANTT as per learning management system (My Learning Passport). It is the responsibility of the registered nurse to remain updated, with evidence of continued professional development.
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	• For children who fall under the Derby/Nottingham/ Leicester umbrella who have a CVAD that needs caring for and/or treatment through/ blood sampling. • To flush the IV line and cannula after the administration of drugs by IV infusion, in between consecutive drugs given by IV infusion, and after blood sampling.
Criteria for inclusion	• Patients under 18 years including the above. • PGD includes peripheral cannulas, long lines, PICC lines and single or double lumen Hickman and Broviac lines,
Criteria for exclusion	• Previous sensitivity or intolerance to the drug or any ingredient. • Patients whose clinical lead team is anywhere other than Derby/Nottingham/Leicester. • For children with lines not included in this PGD. • For fluid restricted children, children under one year and for premature infants please see cautions and seek medical advice
Cautions including any relevant action to be taken	• Hypernatraemia. • Check compatibility with other IV drugs. • If the line is stiff and needs extra flushing 10mls sodium chloride 0.9% may be used per line • Consult local Central Venous Access Device policy if the line is blocked, a flash-back cannot be obtained, or the line appears damaged in any way. • For children who are fluid restricted seek advice from their consultant* as to whether this is appropriate for the individual. • For children under the age of one year and/or premature infants who may have one of the stated CVADs you will also need to seek advice from their consultant* as to whether this PGD dosing will be suitable for their weight. • If the patient is receiving any concomitant medication or treatment it is the responsibility of the person working under this PGD to ensure that treatment with the drug detailed in this direction is appropriate. If in any doubt, advice should be sought and recorded before the drug is administered. ** Any decision to proceed under PGD remains the responsibility of the person working under the PGD legislation. If in doubt about clinical 0suitability following discussion with a consultant (or other professionals), then request a prescription.*
Action to be taken if the patient is excluded	• Refer to medical staff for review and prescribing of alternative agent if appropriate. • In all cases document reason for exclusion.
Action to be taken if the patient or carer declines treatment	• Document refusal, action taken, and advice given in nursing documentation. Refer to patient's consultant to gain further advice
Arrangements for referral for medical advice	Refer to consultant as above for children under the age of 1 year, premature infants and fluid restricted patients or in those patients whose line appears blocked or damaged.

5. Description of treatment

Name, strength & formulation of drug	Sodium Chloride 0.9% injection or infusion
Legal category	**POM**
Route / method of administration	Intravenous
Indicate any off-label use (if relevant)	Not Applicable
Dose and frequency of administration	• Minimum 5ml via manometer line; up to 30ml via standard giving set After blood sampling usual dose is 5mls per lumen (may require 10mls if line is stiff) Volume also depends on age and weight of child. • The rate of infusion should be the same as for the preceding drug infusion. • NB Any child who requires a strict in/out fluid regimen - the flush volume should be included in the child's daily fluid allowance • Maximum dose 30mls
Duration of treatment	As required if being administered by KITE team
Quantity to be supplied (leave blank if PGD is administration ONLY)	Not Applicable - for PGD administration only
Storage	Store at room temperature.
Drug interactions	Possible non-compatible medications given by the KITE team are IV Ambisome and IV Filgastrim, as these require a glucose flush pre and post administration. In these cases the necessary prescriptions would be provided by the patient's clinical lead team on a separate drug card.
Adverse reactions	Injudicious intravenous saline therapy (e.g. post-operative and in patients with impaired cardiac or renal function) may cause hypernatraemia. Osmotically induced water shift decreases intracellular volume, resulting in dehydration of internal organs, especially the brain, which may lead to thrombosis and haemorrhage. General adverse effects of sodium chloride excess in the body include: nausea, vomiting, diarrhoea, abdominal cramps, thirst, reduced salivary and lachrymal secretions, sweating, fever, hypotension, tachycardia, renal failure, peripheral and pulmonary oedema, respiratory arrest, headache, dizziness, restlessness, irritability, weakness, muscular twitching and rigidity, convulsions, coma and death. Excess chloride in the body may cause a loss of bicarbonate, with an acidifying effect. With judicious use of intravenous saline therapy these side effects can be avoided.
Management of and reporting procedure for adverse reactions	Consult a medic or seek medical advice if an adverse event occurs & document in SystemOne or medical record. All serious adverse reactions must be reported under the National yellow card System.
Written information to be	Manufacturer's patient information leaflet, if needed.

given to patient or carer	
Patient advice / follow up treatment	Verbal advice on why the drug was administered, the action of the drug and subsequent management of the condition. If the line was to come unclamped at home, parents would need to alert the KITE team or their Clinical lead team as it would need flushing and locking within that 24hour period.
Records	KITE team administration: Document amount administered and additional information, as below, on SystemOne database. In-patient administration: Document amount administered and additional information, as below, in Nursing documentation and appropriate section of treatment card or ePMA. A second check should be obtained from a qualified healthcare practitioner before administration. 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 and that this was done 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	https://www.medicines.org.uk/emc/product/6269/smpc https://www.medicines.org.uk/emc/files/pil.6269.pdf Information taken also from previous PGD.

7. Registered health professional authorisation sheet

PGD Name [version]: Sodium Chloride 0.9% for flush [v2.0] PGD ref: UHDB144
Valid from: 03/02/2022 Expiry date: 02/02/2025

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.