PARENTERAL THERAPY

ELECTRONIC INFUSION DEVICES

VOLUMETRIC INFUSION PUMPS/SYRINGE DRIVERS

A variety of Electrical Infusion Devices (EID) are available and the manufacture’s guidelines should be adhered to regarding their use. Consideration should be given to electrical safety in the use of these devices. EID should be standardised throughout the organisation.

AIMS

- Improved safety and accuracy when infusing fluid / medication
- Regulation of rate and volume of infusion

BACKGROUND INFORMATION

Syringe pumps and volumetric pumps include a variety of safety features:

- Accuracy of delivery indicator
- Occlusion pressure devices
- Audible alarms
- Anti free flow mechanisms
- Anti tamper
- Battery back up systems

Syringe Drivers:

- Are calibrated in millimetres per hour
- Used for subcutaneous infusion.
- Provide a smooth and precise delivery of low volumes of fluid to specific patient populations
- Used with standard sterile syringes
- Include audible and visual alarms
- Are battery operated (e.g. Graseby pump)

KEY POINTS

1. Absolute indications for use:
   - All drug additives, i.e. heparin, opiates, potassium, Syntocinon **excluding antibiotics**
   - Central venous access infusions
   - Total Parenteral Nutrition
   - Vulnerable patients at risk from rapid infusion or those on volume restrictions
   - Infusion of viscous products, i.e. blood products
   - Rapid infusion unable to be achieved by gravity
   - When peripheral access is difficult
   - Critical infusions of small volumes

2. Choose the electronic infusion device that best suits the circumstances, patient condition, intended therapy and care setting.

3. Manufacturers’ guidelines should be adhered to in the use of electronic infusion devices.

4. Electronic infusion devices should be considered an adjunct to nursing/midwifery care and are not intended to alleviate the nurse’s/midwife’s responsibility for regularly monitoring and documenting the infusion rate of the prescribed therapy.

5. When administering drugs, the frequency of monitoring will depend on the specific drug protocol.
REFERENCES (STANDARDS)

Related Policies – Section P Pharmacy and Medications
Other related documents – Nil

RESPONSIBILITY
Policy Sponsor | Midwifery and Nursing Director
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