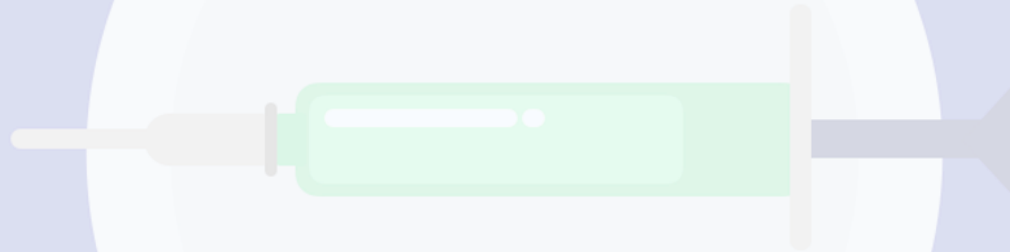




HYPODERMOCLYSIS



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CMDA Meeting Dec 6, 2022



Definition of Hypodermoclysis (Clysis)

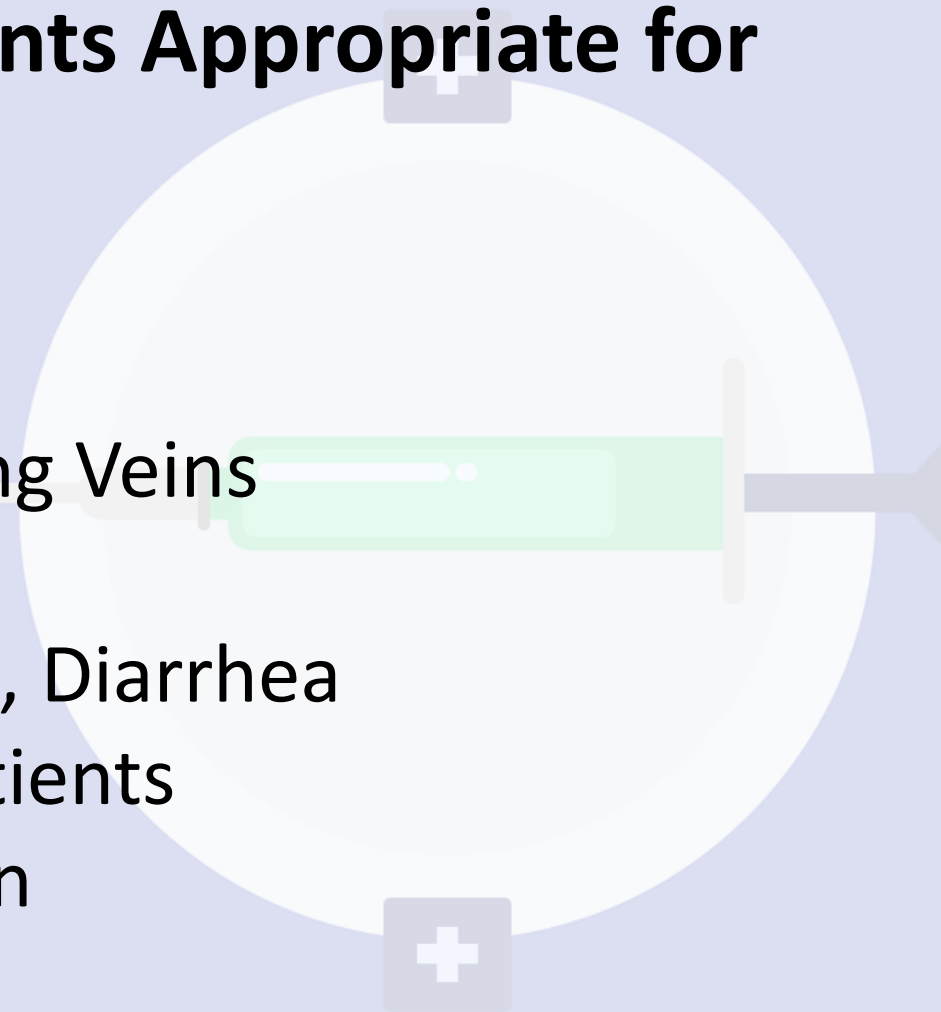
- **Method of infusing fluid in the subcutaneous tissue in patients**
- **Helpful when there is difficulty in obtaining Intravenous access**

Why Do Hypodermoclysis?

- Reduces need for Patient to be sent to the hospital for IV initiation
- Decreases agitation and discomfort by patient due to potentially multiple IV insertion attempts.
- Works well on Patient with mild to moderate dehydration
- Patient unable to Ingest enough oral fluids to assist with hydration
- Assists Patients with short term GI infection IE: Gastroenteritis, Diarrhea, Vomiting, and patients needing fluid support while treating infection.

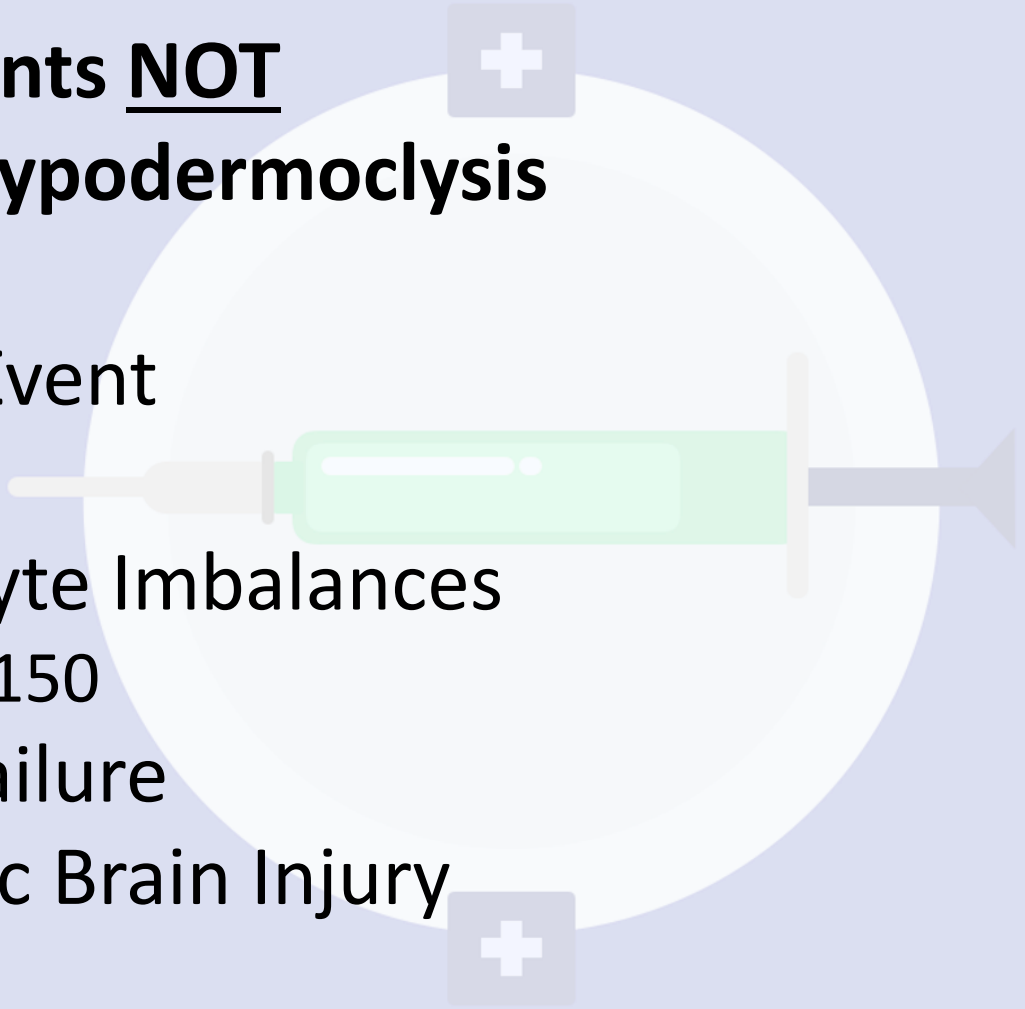
Examples of Patients Appropriate for Hypodermoclysis

- Dehydration
- Difficulty Accessing Veins
- Poor PO Intake
- Nausea, Vomiting, Diarrhea
- Palliative Care Patients
- Bowel Obstruction

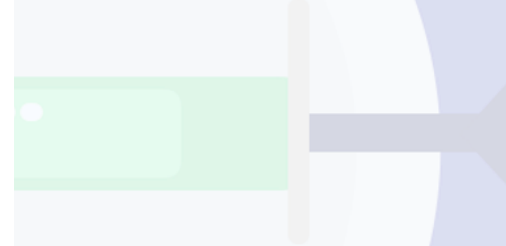
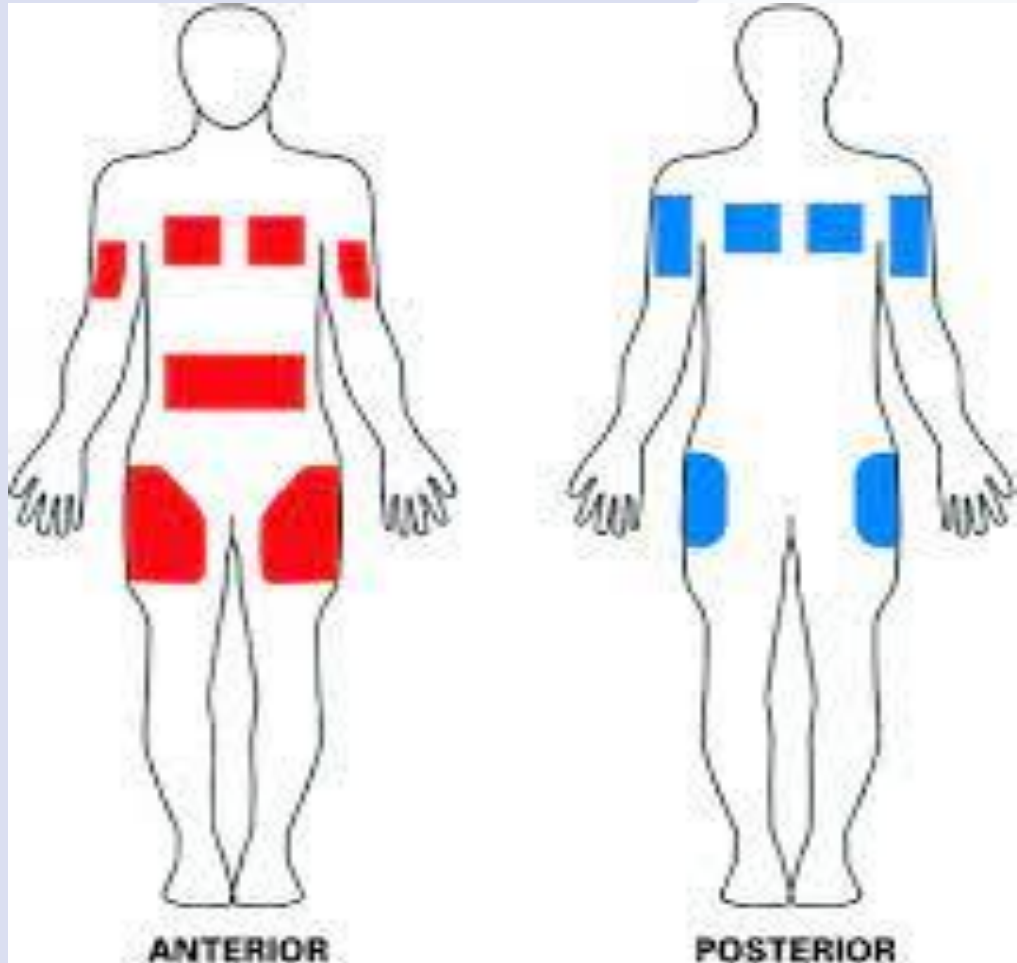


Examples of Patients NOT Appropriate for Hypodermoclysis

- Acute Cardiac Event
- Septic Shock
- Severe Electrolyte Imbalances
 - Example: $NA > 150$
- Severe Heart Failure
- Acute Traumatic Brain Injury



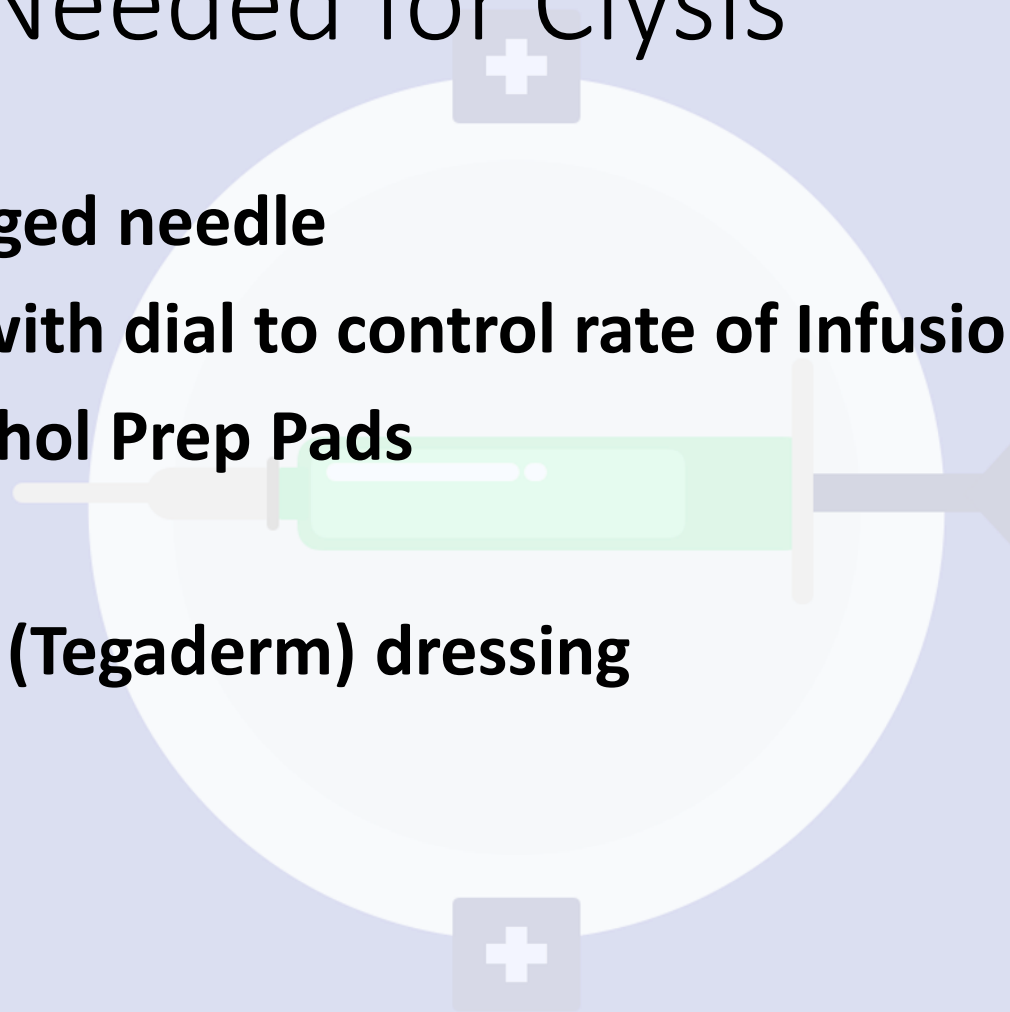
Potential Infusion Sites



Lateral Abdominal Wall is the most common site used

Equipment Needed for Clysis

- **23-25 gauge winged needle**
- **Infusion tubing with dial to control rate of Infusion Pump**
- **Betadine or Alcohol Prep Pads**
- **Infusion fluids**
- **Transparent film (Tegaderm) dressing**
- **Tape**



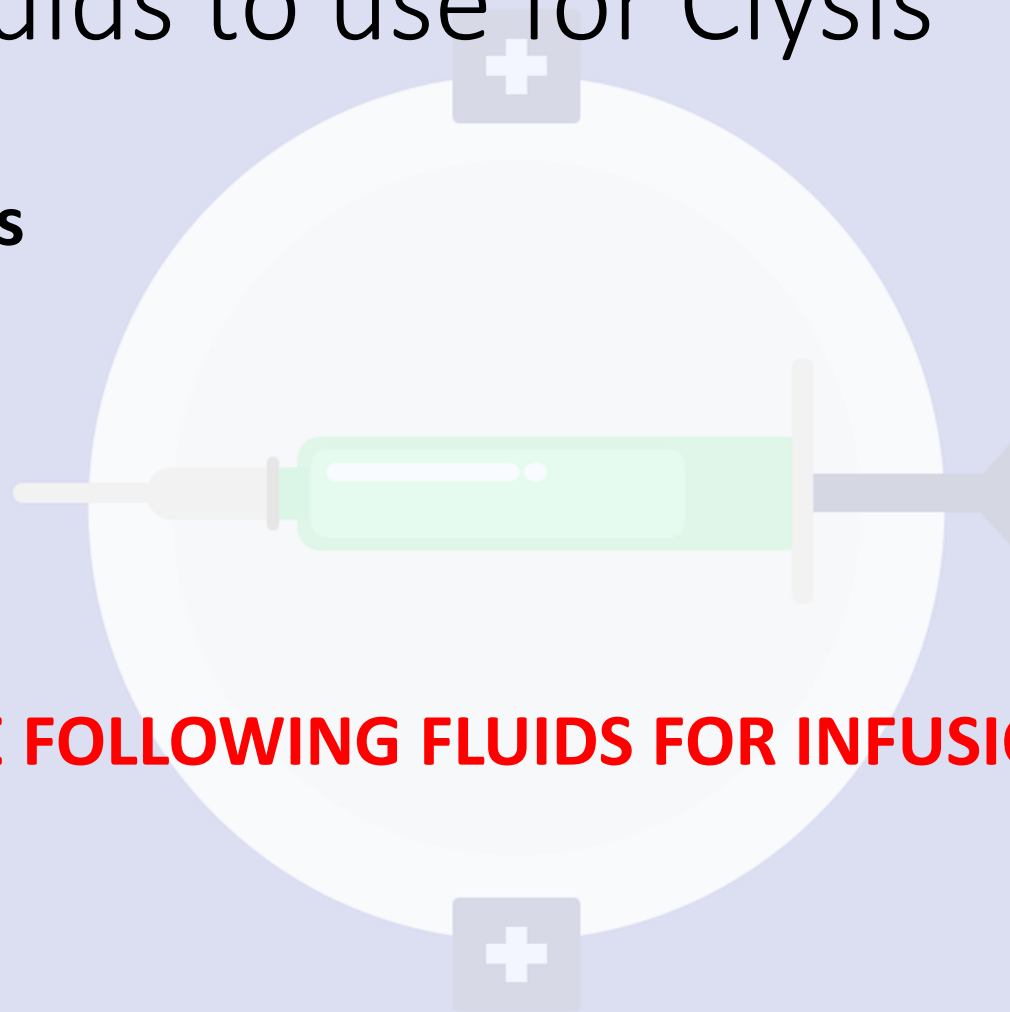
Preferred Fluids to use for Clysis

- **Isotonic solutions**

- NS
- D5NS (calories)
- D5 ½ NS
- D5 ¼ NS
- D5 LR

- **DO NOT USE THE FOLLOWING FLUIDS FOR INFUSION**

- 3% NS
- D10W
- D5W



Procedure for Infusion



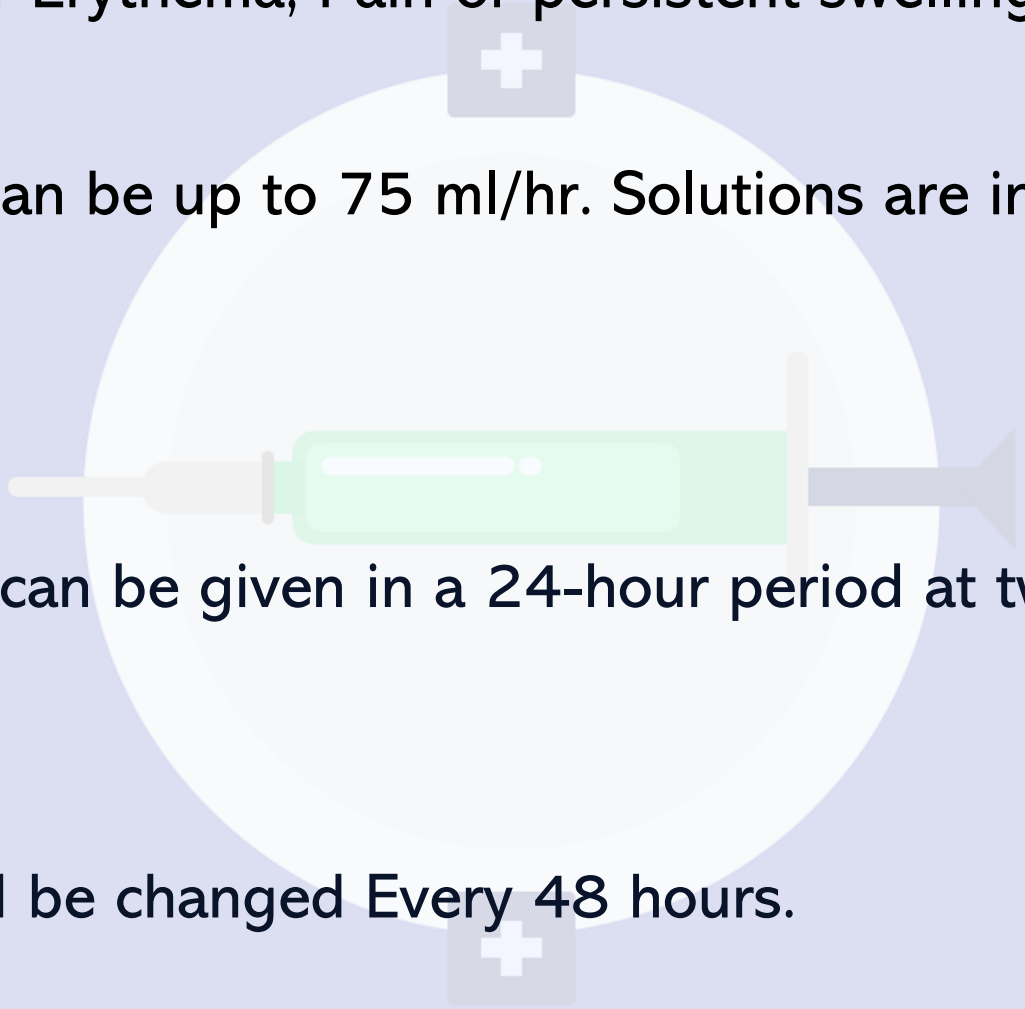
- Prime tubing with desired fluids
- Cleanse site with Alcohol or Betadine prep pad
- With the needle bevel up, insert at 45-60 degree angle
- Secure the site utilizing the transparent dressing
- Attach the fluids and set to desired rate
- Time, Date and Initial the site for reference of when to rotate sites

Monitor the Site for Erythema, Pain or persistent swelling

The infusion rate can be up to 75 ml/hr. Solutions are infused by gravity, or rate dial on tubing

Approximately 3 L can be given in a 24-hour period at two separate sites.

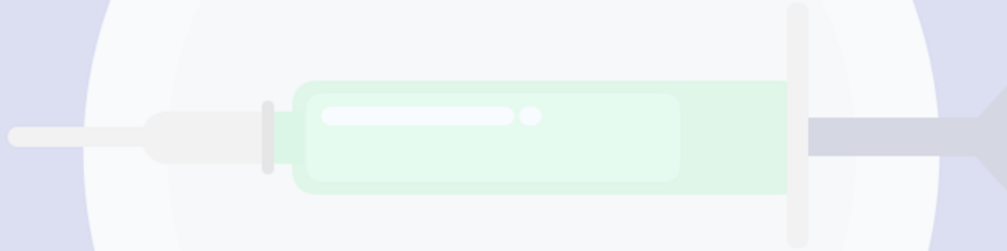
Infusion site should be changed Every 48 hours.



Adverse Effects of Performing Hypodermoclysis

- **Localized Edema**- Typically resolves with Massage at site
- **Pain or Discomfort at insertion site**- May be caused by deep insertion or fast infusion
- **Site Cellulitis**- Can be avoided by using aseptic technique and change needle site Q 48 hours

Questions?



References

- Hypodermoclysis: An Alternative Infusion Technique. Sasson M, Shvartzman P. *Am Fam Physician*. 2001;64(9):1575-1579.
- Facility Education- Hypodermoclysis, An Alternative to IV Therapy in Long Term Care. Optum. June 2021.

