



Appendix A: Hypodermoclysis Protocol

Hypodermoclysis is a simple, safe and effective technique for subcutaneously administering fluids to a patient who requires hydration. It avoids the need for venous access in patients who, at the end of life, often have very poor veins. In the home/hospice/residential care facility settings, it can be carried out without the need for fully IV credentialed nursing staff. Refer to the local Home and Community Care office (refer *Associated Document: Resource Guide for Practitioners*) for when and how to refer.

There are two critical considerations regarding initiating hypodermoclysis in palliative patients:

1. Objectives and timelines must be clear and agreed upon by the family and caregivers.
2. Will adding fluids to a patient whose organ function is failing precipitate cardiac failure and/or cause or worsen lung secretions?

► Procedure:

- A 23-25 gauge butterfly needle is inserted under the skin at a 30–45 degree angle. Ask patients which site is preferred of the following choices:
 - For ambulatory patients, consider using chest (subclavicular area), back (infrascapular area) and upper abdominal wall (avoiding waist).
 - For bed-bound patients, use medial or lateral thighs or upper abdomen.
 - Avoid previously irradiated skin, anterior or lateral thigh if edema is present, abdomen if ascites is present, breast tissue, lateral placement near the shoulder, arms, and perineum/groin.
- The fluids used are commonly normal saline (0.9%), normal saline/dextrose (2/3-1/3) and Ringer's Lactate. Dextrose cannot be used as a hypodermoclysis solution.
- The infusion rate can be up to 75 ml/hr. Solutions are infused by gravity, i.e., a pump is usually not necessary.
- Some patients may only require 1 litre 3–4 times per week, rather than daily administration. A smaller volume (1 liter per day) is often adequate to maintain hydration in terminally ill patients requiring hydration for symptom control.
- Potassium chloride up to 40 mEq per litre may be added to the solution. Do not mix hypodermoclysis solutions with other medications. If medications are being administered by the SC route, use separate site(s).
- Change the solution bag every 24 hours. Change the tubing every 72 hours. Change the SC site if painful, red, hard or leaking.

Subcutaneous hypodermoclysis sites may last up to seven days. Daily assessment of client condition and insertion site is necessary.