Hypodermoclysis with older adults

I’m an experienced med-surg nurse who just took a position as charge nurse at a long-term care (LTC) facility that uses hypodermoclysis (HDC) as an alternative to I.V. therapy. When and why is this technique used?—J.R., N.J.

Linda S. Smith, PhD, MS, RN, CLNC, replies: Also known as clysis, HDC is a process for administering isotonic fluids subcutaneously. This fluid replacement technique is less invasive than standard I.V. therapies and can be used in nonemergency situations.

So what are HDC’s limitations? HDC hydration infusions are isotonic.¹,² They’re contraindicated for delivering rapid or emergency fluid replacement (greater than 3 L/24-hr period), most medications, and parenteral nutrition. Patients who are in shock and need fluid titration, those who require hypertonic or hypotonic infusions, and those who are experiencing extreme electrolyte imbalances aren’t candidates for HDC.³

Potential HDC complications are uncommon and often avoidable with excellent technique, assessment and monitoring, and patient education. Possible complications include local bleeding, edema, warmth, erythema, ecchymosis, pain, abscess, and infection.¹,³

Besides careful patient and site assessments and monitoring, nursing procedures that limit complications include aspiration at the time of needle insertion (to prevent blood vessel infusion), more frequent site rotation if signs and symptoms of irritation occur, and careful insertion and volume control techniques.

Patient education should include the necessity of immediately reporting any problems such as pain/discomfort, redness, swelling, or leaking.¹

I.V. access can be especially difficult and impractical when older patients are confused, frail, and dehydrated. I.V. fluid replacement is very expensive due to the materials needed, nursing time required, costs of hospitalization, and risks for complications such as pain, local or systemic infection, phlebitis, and thrombosis.¹,²

For these reasons, HDC infusions are more cost-effective. Because these subcutaneous fluid infusions are almost always administered via gravity drip, they don’t require expensive pumps and multiple staff-development hours. Best of all, HDC infusions prevent unnecessary hospitalizations for mild-to-moderate dehydration. The costs, difficulty, pain, stress, and potential patient confusion associated with relocating patients to a hospital setting (from hospice, home, or LTC) are avoided. Patients with poor venous access options are spared the pain of repeated “sticks.”

HDC is a safe, effective, and low-tech method of delivering fluid to carefully selected patients. For more information, see “Hypodermoclysis: An Alternative to I.V. Infusion Therapy” in the November issue of Nursing2011.

REFERENCES


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