SUBCUTANEOUS INFUSION THERAPY DOSING RECOMMENDATIONS

Drug	Hourly Dose	24 Hour Dose	Concentration Range	
Morphine	Highly variable – titrate to effect		1-15mg/ml	
Hydromorphone	Highly variable – titrate to effect		1-10mg/ml	May be preferred in patients with high opioid requirements.
Metoclopramide	0.83mg/hr 1.67mg/hr 3.33mg/hr	20mg/24hrs 40mg/24hrs 80mg/24hrs	1-2mg/ml	
Ondansetron	0.5mg/hr 1mg/hr 1.5mg/hr	12mg/24hrs 24mg/24hrs 36mg/24hrs	0.3- 1.3mg/ml	
Midazolam	Usual dose: 1-7mg/hr (0.02-0.1mg/kg/hr)		1-5mg/ml	

Infusion recommendations: Desirable sites for administration include: abdomen, upper chest, above the breast, over an intercostal space and the scapular area (see below). In bedridden patients, preferred sites are the thighs, the abdomen and the outer aspects of the upper arm. Infusion site should be rotated every 1-5 days. The recommended diluent is normal saline with an infusion rate of 1-2 ml/hr (maximum of 3ml/hr). The slower the rate, the infusion will be better tolerated. The number of additives infused per individual site is restricted to two medications.

IF higher doses are ordered and it becomes necessary to increase the SQ infusion rate, it will also become necessary to increase the amount dispensed by the pharmacy. Given the over fill that is necessary for priming of IV sets (primary infusion set – 15ml, secondary sets – 7ml), the following dispense volumes are recommended:

- 1ml/hr -> 50ml
- 1.5ml/hr -> 50ml
- 2ml/hr - > 75ml
- 2.5ml/hr -> 75ml
- 3ml/hr -> 100ml

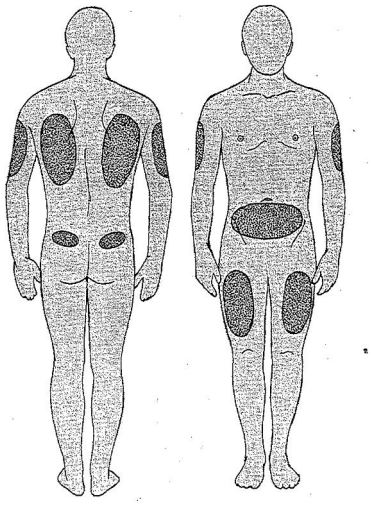


FIGURE 26-1 Common sites for subcutaneous injections. (From Potter PA, Perry AG: *Basic nursing: essentials for practice,* ed 6, St Louis, 2007, Mosby.)