1- Myth: Partial parenteral nutrition therapy requires the placement of a central line.

Reality: Partial parenteral nutrition can be administered via a peripheral catheter. It appears that the rate of mechanical complications with this method of administration is approximately 26-40%. Peripheral administration of parenteral nutrition is not devoid of complications. It appears that peripheral catheters will last approximately 36 hours, and are compatible with hyperosmolar parenteral solutions with an osmolarity ranging from 840 – 1350 mOsm/L. Complications including mechanical, septic, and metabolic, still occur.

2- Myth: Famotidine causes hemolysis in cats.

Reality: Plumb’s 7th edition lists this as a possible idiosyncratic drug reaction reported only anecdotally. A 2008 study found no adverse effects from administering famotidine intravenously over 5 minutes in cats.

3- Myth: Carbonated soda products and cranberry juice are effective at dissolving feeding tube diet clogs.

Reality: Tap water and tap water + ¼ tsp pancreatic enzyme + 325 mg sodium bicarbonate are effective over any other anecdotal liquid for dissolving feeding tube clots. A 2013 in vitro study created simulated diet clogs and flushed them with distilled and tap water, various amounts of pancreatic enzyme (with and without sodium bicarbonate), various soda products (Dr. Pepper, Mountain Dew, and Coca-Cola), cranberry juice, and other enzymatic products (papain, and bromelain). The pancreatic enzyme formulation (Viokase powder) with sodium bicarbonate/water was superior to all other products, with distilled and tap water right behind.

4- Myth: Heparinized saline flushes are mandatory to prevent clot formation in peripheral catheters.

Reality: Many human studies have found no benefit with preventing catheter clots using heparinized saline solutions. A 2013 prospective randomized veterinary study also found no benefit in utilizing a 10 IU/mL heparin flush as compared with 0.9% saline for maintaining catheter patency. The saline flush maintained 18 gauge peripheral intravenous catheters in dogs up to 42 hours.
5- Myth: Fluid bags can be used indefinitely for intermittent intravenous fluid administration.

Reality: A recent unpublished abstract identified light bacterial colonization of a hanging intravenous (IV) bag after three days of being spiked. This follows a 2011 paper documenting bacterial colonization of IV fluid bags after 30 days from initial puncture. The 2011 CDC Guidelines for the Prevention of Intravascular Catheter-Related Infections recommends changing administration sets of IV fluid bags every 72-96 hours, blood product or lipid infusion sets every 12 hours, and propofol infusion sets every 6-12 hours.

6- Myth: Acepromazine is contraindicated in patients with a history of seizure disorders because it decreases the seizure threshold.

Reality: Three retrospective veterinary studies have examined whether the administration of acepromazine increases the incidence of seizures in seizure-prone dogs. A 2006 study found no increased seizure events in 36 dogs with a seizure history up to 16 hours after administration and reduced seizure activity in a few dogs. Another 2007 retrospective study found no correlation with acepromazine administration to dogs with an acute or chronic seizure history and additional seizure activity. Finally, a 2012 study found no increase in seizure frequency post-myelogram in dogs premedicated with acepromazine prior to myelography.

7- Myth: Indirect blood pressure monitoring using oscillometric devices are as accurate as direct blood pressure methods in critically ill patients.

Reality: Direct arterial blood pressure monitoring is considered the gold standard for blood pressure monitoring. Several laboratory and research studies suggest that oscillometric devices overestimate blood pressure in hypotensive patients. Additionally, although a 2013 study was able to validate a specific high definition oscillometric monitor for measuring mean and diastolic arterial blood pressure values, it could not do so for systolic blood pressure.

8- Myth: Intermittent (bolus) feeding through feeding tubes is superior to constant rate infusion of enteral nutrition in hospitalized canine and feline patients.

Reality: Intermittent (bolus) feeding and continuous infusion of enteral nutrition was found to have equivalent delivery of percentage of prescribed nutrition (PPND) in a 2010 study with no significant complications.
Myth: Pancreatitis is an absolute contraindication for providing early enteral nutrition in critically ill cats.

Reality: A 2009 retrospective study identified 55 cats with suspected acute pancreatitis who received enteral nutrition via a nasogastric tube (NGT) after admission. The study reported a low incidence of diarrhea, vomiting, or mechanical problems. This study concluded that NGT feeding in feline patients with acute pancreatitis tolerated this method of feeding.

9- Ueda Y. et al. Comparison of heparinized saline and 0.9%sodium chloride for maintaining peripheral intravenous catheter patency in dogs. J Vet Emerg and Crit Care 2013;23(5):517–522


