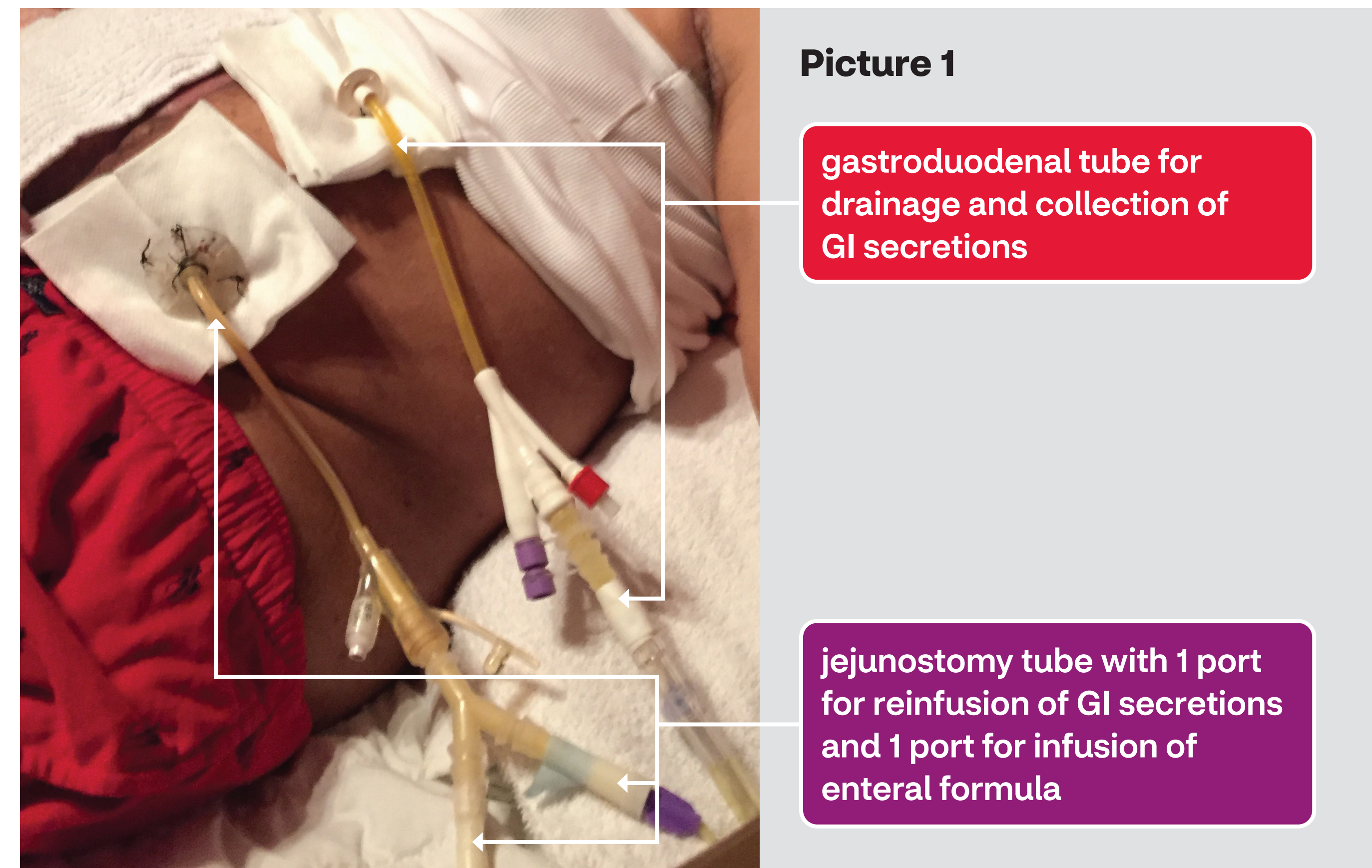


Reinfusion of gastrointestinal secretions via J tube in the home setting: A case study and illustration

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Case Presentation

59-year-old male with surgical history of resection of 40cm proximal jejunum and discontinuity of intestine related to mesenteric ischemia. Patient prescribed enteral therapy and reinfusion of collected GI secretions in preparation for reconstructive surgery. Access devices included a gastroduodenal tube for GI secretion drainage with collection from the distal duodenum and a 16FR direct jejunostomy tube for enteral feeds (*Picture 1*).



Drainage and Feeding Regimen

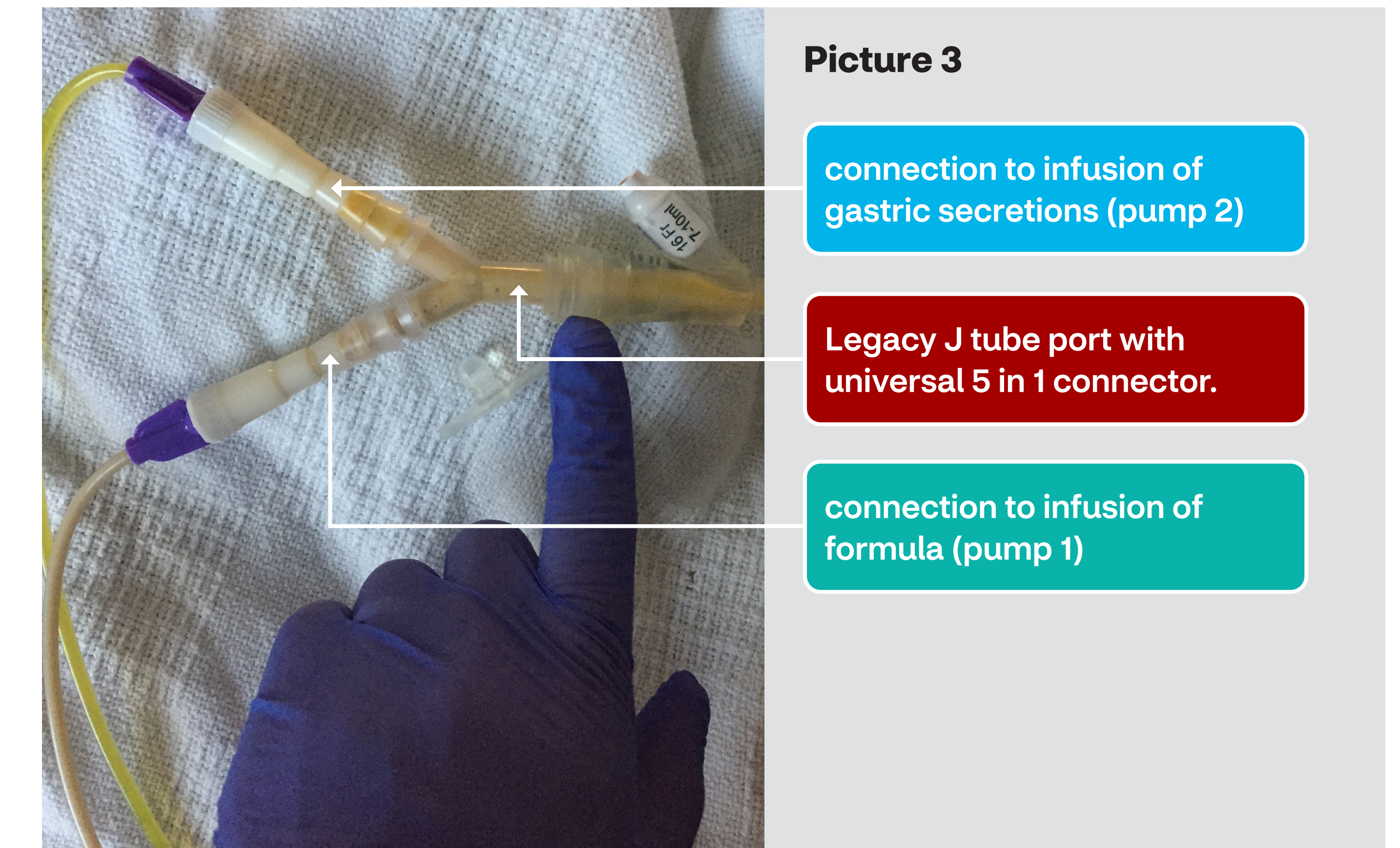
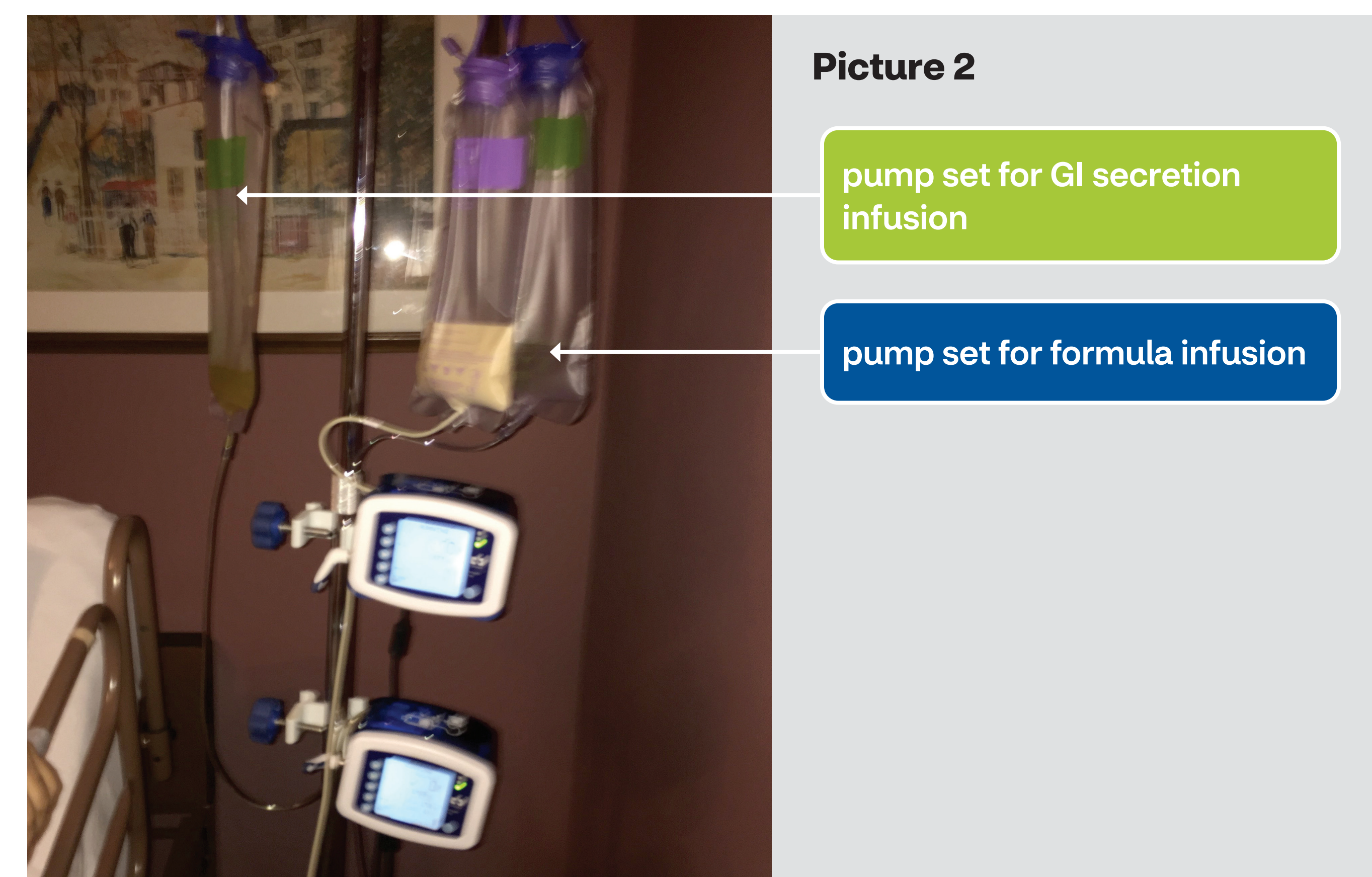
- GI secretions collected via drainage bag attached to gastroduodenal tube, measured, and reinfused via J tube every 4 hours via feeding pump. (i.e. 200 ml collection flushed at 50 ml/hr)
- Standard 1.2 calorie non-fiber formula via J tube at 65ml/hr with 100ml water flush every 6 hours. Flushes later changed to 17ml flush every hour for tube clog prevention

Clinical Intervention

Routine clinical follow up by home care dietitian included phone and video chat with monitoring of weight and tolerance, reinforcement of GI secretion infusion calculations and rates, identifying appropriate supplies, tube site care education, tube clog and pump alarm troubleshooting, optimal flushing protocol and education, and oral diet advancement support.

Supplies

- 2 enteral feeding pumps (*Picture 2*)
- Feed and flush bags (formula and water infusion, pump #1)
- Spike and flush sets (gastrointestinal secretion infusion, pump #2)
- 60 ml catheter tip syringes
- Uro drain bags (gastrointestinal fluid drainage from duodenal tube)
- Universal 5 in 1 connector (*Picture 3*)



Outcome

Reconstructive GI surgery was performed after seven months of home tube feeding and GI secretion re-infusion. The gastroduodenal tube used for drainage was converted to a gastric tube for enteral feeds and J tube was removed. Oral diet advanced from clear liquids to regular diet as tolerated. One month later, home enteral feeds were discontinued due to successful oral diet transition. Patient remains healthy and successful on exclusive oral diet now 19 months after discontinuation of home enteral feeds and GI secretion reinfusion.

Conclusion

Enteral feeds with concurrent reinfusion of drained GI secretions in the home setting is a safe alternative to hospital or skilled nursing facility admission when complex GI rehabilitation is required. Home care is also cost-effective, saving approximately \$50,000 over seven months in estimated nursing home healthcare costs.* Lastly, home care dietitians skilled in enteral nutrition are an important component of the home care solution for the complex GI patient population.