

An ileus for the ages

The clinical course of Mr. J. highlights the possible risk for ileus when nutrition is delayed

Ileus background

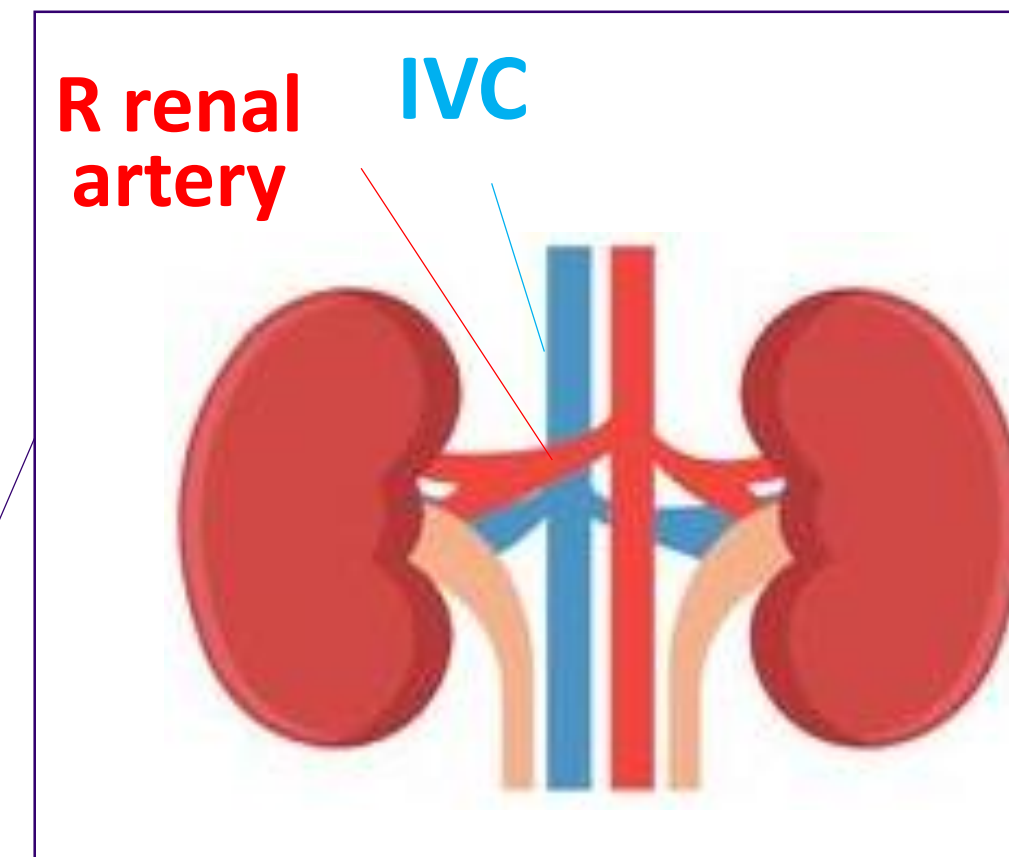
- Surgical patients commonly develop a post-op ileus
- Current literature supports feeding the gut early both to prevent ileus formation and to reduce duration
- A persistent ileus can lead to distension, constipation, EN intolerance and necessitate aggressive interventions

Patient Profile: Mr. J

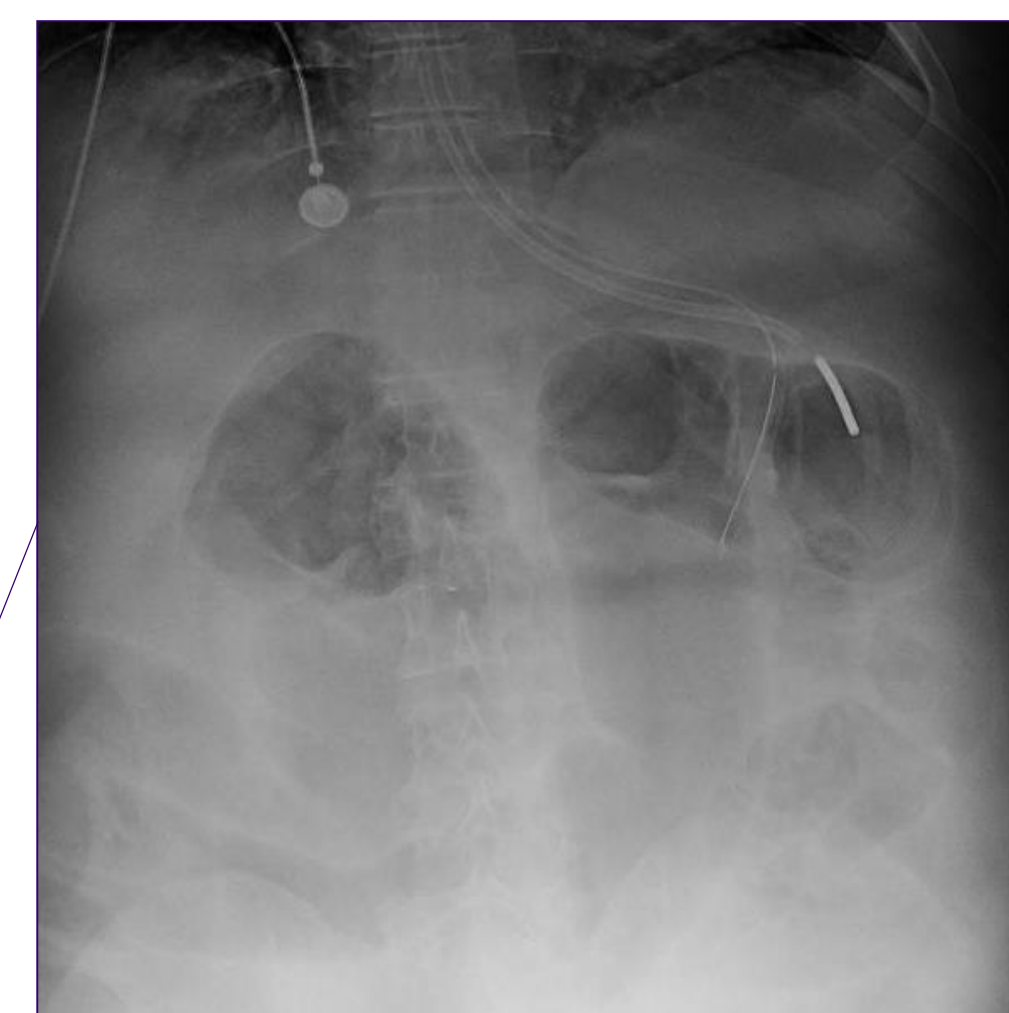
- 55-year-old male
- Dry weight: 125.6 kg
- Height: 175 cm
- BMI: 43.5
- Calorie needs: 2410-2780 (BEE x 1.3-1.5); Protein needs: 145-193g (1.5-2.0g/kg)
(Assessed using an adjusted body weight for obesity of 95.8kg)
- April 2018, Mr. J came to HMC for planned removal of an IVC filter
- Mr J. developed an acute kidney injury and a post-operative ileus
- Ultimately required total parenteral nutrition (TPN) after prolonged intolerance to enteral nutrition (EN).

Patient Timeline

April 9 – April 10	Planned surgical removal of IVC filter. Post-surgery, IVC/right renal artery fistula and kidney ischemia noted. Patient diagnosed with AKI, intubated, OG tube placed.
April 11	Patient started on renal EN formula, but received little of goal d/t frequent emesis. High gastric residual volumes. Abdomen distended, pt constipated
April 14	Hemodialysis initiated due to worsening AKI. TF tolerance continues to be very poor. Ileus suspected.
April 17	TF intakes still very low, off and on between 10 – 25 ml/hr
April 19	Ileus confirmed via abdominal X-ray showing distension
April 20	TPN initiated
April 26	Consistent bowel movements, ileus resolved. Team to attempt re-initiating EN if patient not cleared for PO by SLP
April 27	Patient cleared for PO intake, remains on TPN while receiving 1:1 feedings



Nepro at 60mL/hr + 30mL prosource BID to provide 2,710 kcals, 147g protein

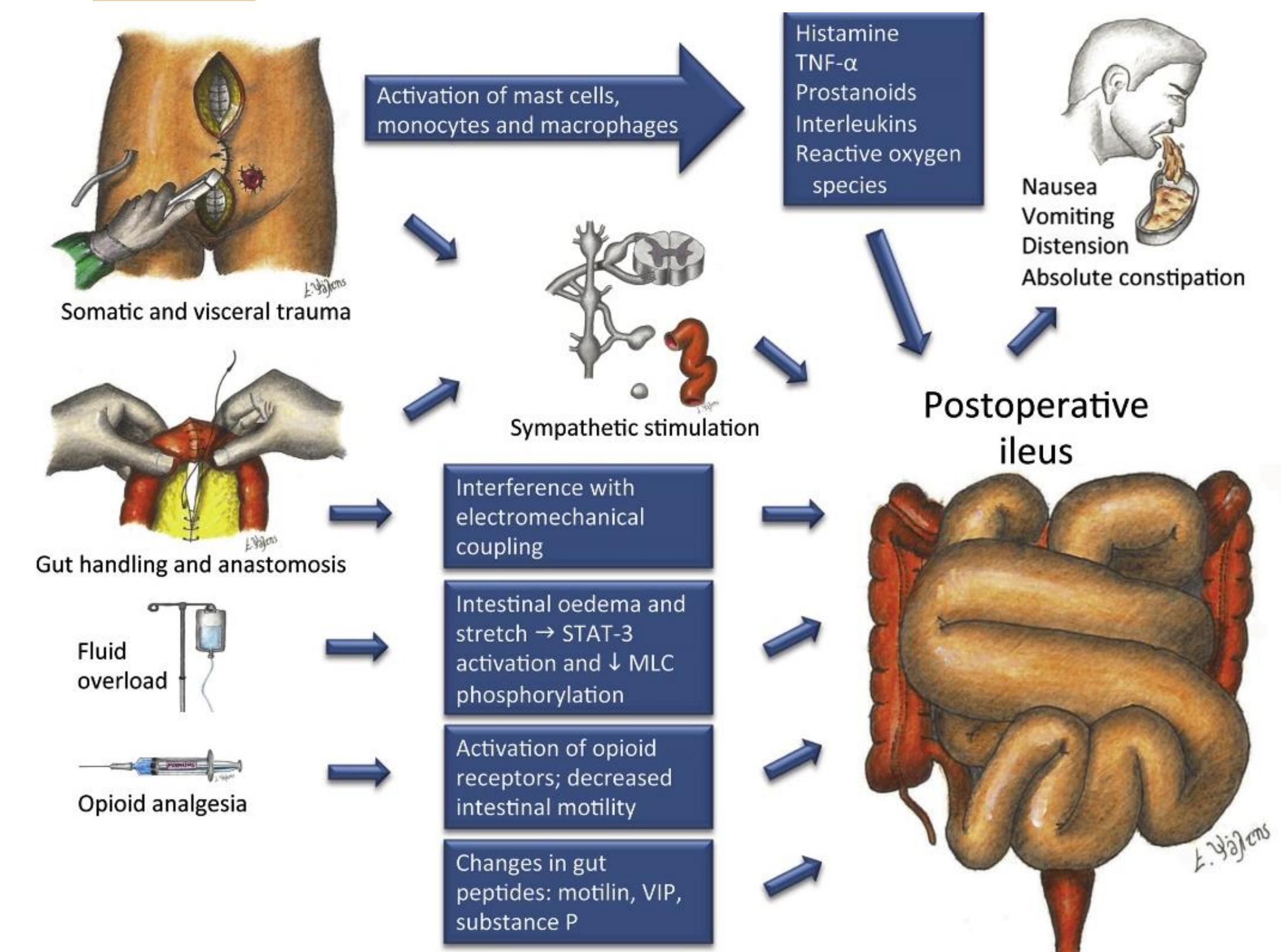


TPN goal = 340g dextrose, 160g amino acids, 20% IV lipids 250ml to provide 2,295kcal, 160g protein if all received

PES Statements

- Altered GI function related to ileus as evidenced by distended abdomen, EN intolerance for more than 1 week, and need for TPN.
- Inadequate intake from enteral/parenteral nutrition related to ileus, as evidenced by the need for supplemental PN support and inability to advance tube feeds to goal.

Ileus Pathogenesis



Source: Bragg, D., et al. (2015) *Postoperative ileus: Recent developments in pathophysiology and management*