Bowel Preparation: Overrated

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General Surgery Grand Rounds
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Overview

- Historical significance
- Harm? What harm?
- Practicing evidence-based medicine
- Current guidelines
- Conclusions

History of Bowel Prep

- Hughes 1972
 - "ancillary procedures which tend to be accepted with little question and [...] have become indispensable ritual"
 - No benefit to bowel prep or gut decontamination (neomycin)
 - Omission of bowel prep "welcome"

History

- Brownson et al, 1992
 - 179 patients
 - First randomized controlled trial
 - Showed increased risk of abscess, anastomotic leak with bowel prep
- Followed by many, many more

Harm? What harm?

- Subjective
 - Abdominal cramping
 - Bloating
 - Nausea / vomiting
 - Dehydration, electrolyte abnormalities
- Non-compliance

Harm? What harm?

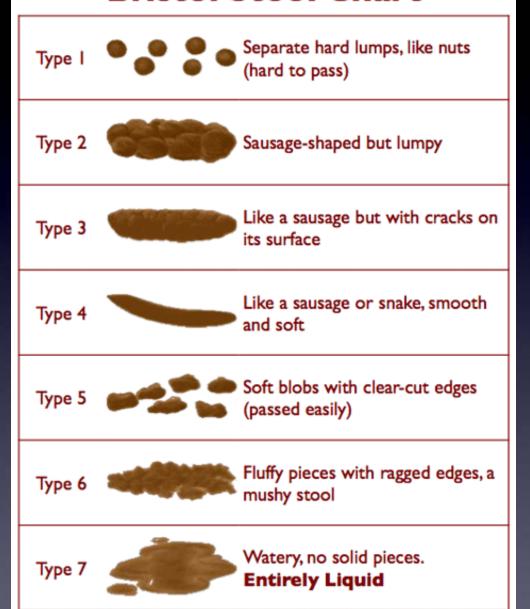
- Objective
 - Increased bowel wall edema
 - Compromised microcirculation
 - Bacterial translocation
 - Disruption of endoluminal homeostasis
 - Increased spillage?

Increased Spillage?

	Prep	No Prep
Liquid Stool	56%	41%

	Spillage	
Solid Stool	3%	
Liquid Stool	31.2%	

Bristol Stool Chart





Meta-Analyses

(yes, plural)

- Suggestion of increased anastamotic leakage
- Slim et al, 2009
 - Primary: anastomotic leakage
 - Secondary: other infections
 - Bowel prep not beneficial, no difference between types

Cochrane Metaanalysis

- Updated 2011
- Evaluated many params
 - Anastamotic leakage, infection, reoperation, operation type, mortality, DVT rates, MBP vs enema



Cochrane Metaanalysis

● 18 RCTs - 5,805 patients

Outcome	P vs NP	P vs E
LAR leakage	no difference	no difference
Colonic leakage	no difference	no difference
Mortality	no difference	no difference
Re-operation	no difference	no difference
Wound infection	no difference	no difference

Best Care for Patient

- Pre-operative antibiotics
 - (noted by Hughes in 1972!)
- Appropriate antibiotic selection
- Omit bowel prep in elective colonic operations