

Bowel Preparation: Overrated

Kyle Rove, R2
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University of Colorado
Anschutz Medical Campus

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

Type 1  Separate hard lumps, like nuts
(hard to pass)

Type 2  Sausage-shaped but lumpy

Type 3  Like a sausage but with cracks on
its surface

Type 4  Like a sausage or snake, smooth
and soft

Type 5  Soft blobs with clear-cut edges
(passed easily)

Type 6  Fluffy pieces with ragged edges, a
mushy stool

Type 7  Watery, no solid pieces.
Entirely Liquid



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 Meta-analysis

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



Cochrane Meta-analysis

- 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

