

Gut preparation

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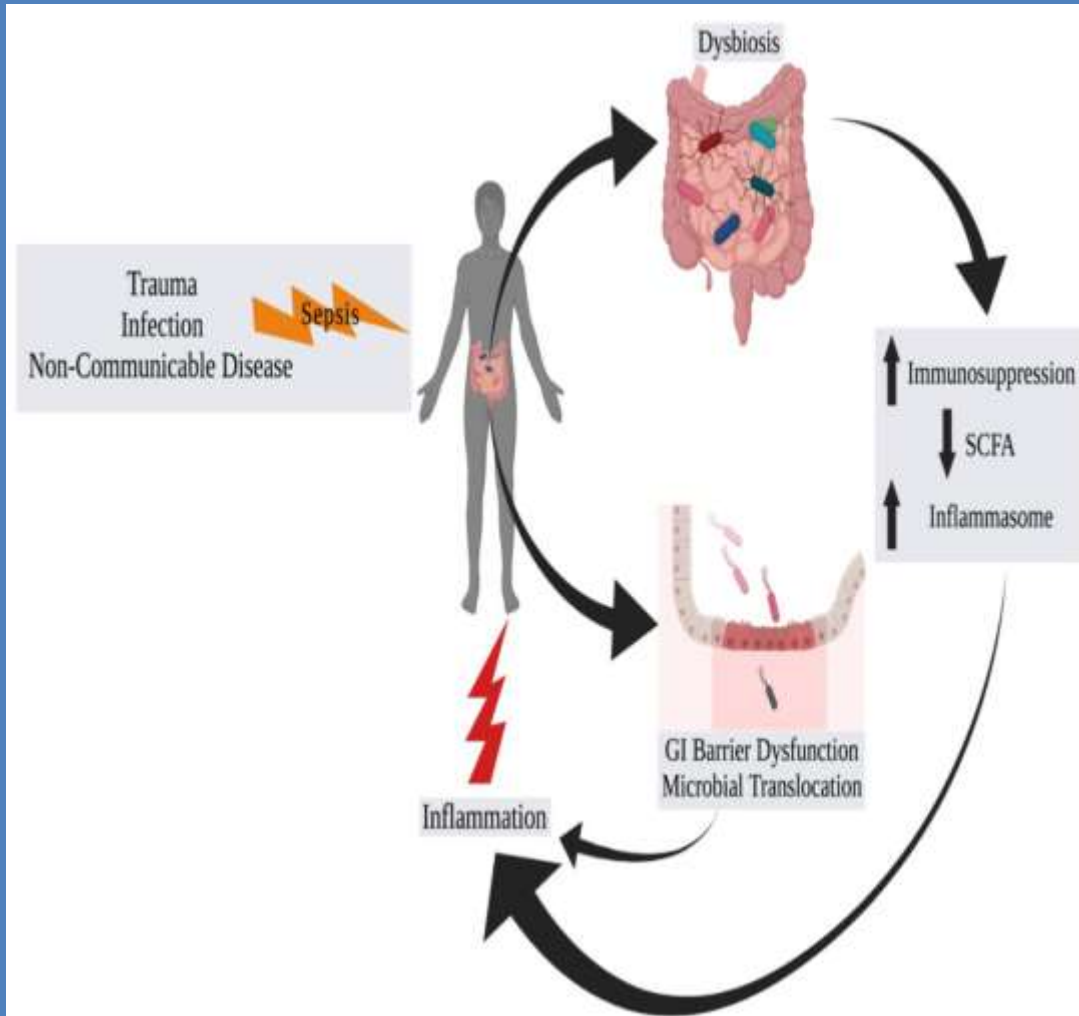
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Bacterial translocation

Passage of bacteria & their byproducts through an intact mucosa to extraintestinal site-

- Mesenteric LN.
- Liver.
- Spleen.
- Blood
- Brain.



Gastrointestinal bacteria

Prox. SI-

- $<10^3$ /ml fluid.
- Due to HCL, bile, pancreatic juice.
- Lactobacilli, *E. faecalis*.

Distal SI-

- 10^8 / ml fluid.
- Due to PH change.
- Lactobacilli, *E. faecalis*, bacteroids, Coliforms.

Large intestine-

- 10^{12} /gram faeces.
- >300 species.
- Anaerobic: facultative A. ratio- 300:1.

Beneficial effects of normal flora

- Prevent colonization of pathogens.
- Produce antimicrobial substance.
- In newborn- stimulus for development of immune system.
- Synthesize vit. B & K.
- Metabolize dietary carcinogens.

Counselling-

- About disease.
- Necessity of gut prep.
- Procedure.
- Benefits.
- Complications.
- S/E.
- Communications.
- Special instructions.
- Any questions.

Aim-

- Cleaned out.
- To see any problems.

Steps-

- Fasting one night.
- Cleaning.

Gut preparation

Mechanical cleansing.

Chemical cleansing.

Mechanical bowel preparation

Mechanical ways to reduce the bulk of stool.

- PEG.
- Sodium picosulfate (Picolax).
- Hercules preparation.
- Enemas.
 - Enema simplex.
 - Compound enema (water, soap, paraffine, glycerine, castor oil, MgSO_4).
 - Fleet enema (NaPO_4).

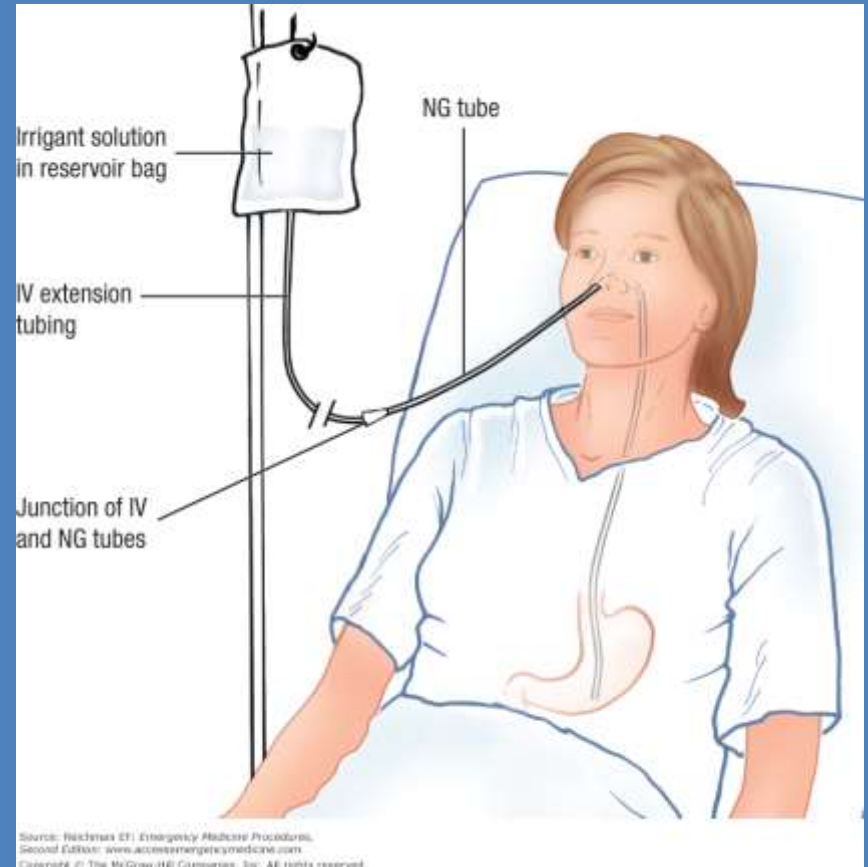
Chemical cleansing -reduces bacterial count.

- 3 days preparation.
- 2 days preparation.
- 1 day preparation.
- No bowel preparation.

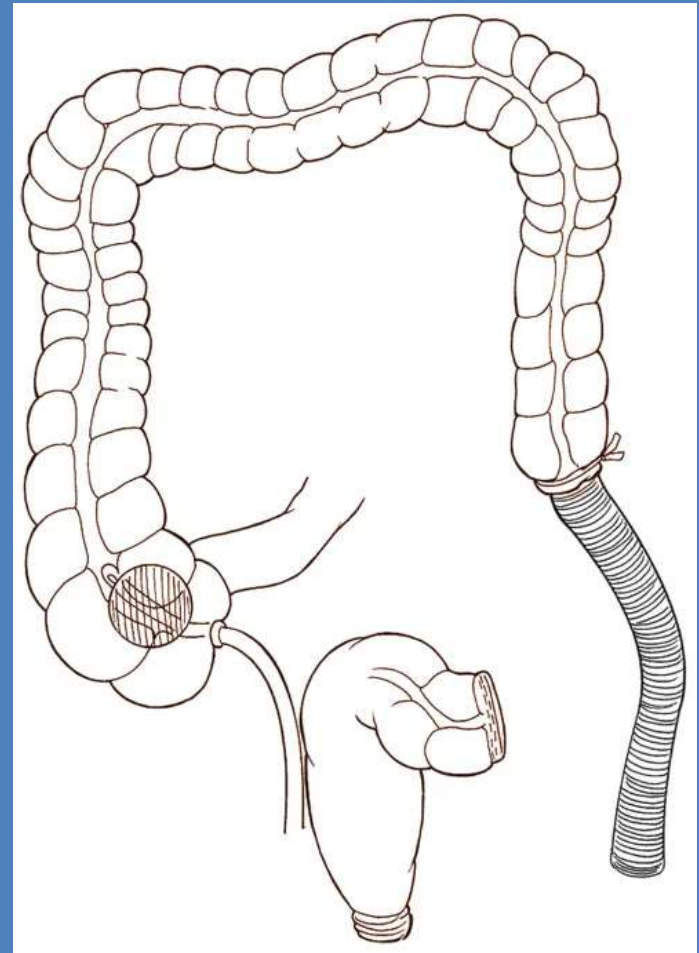
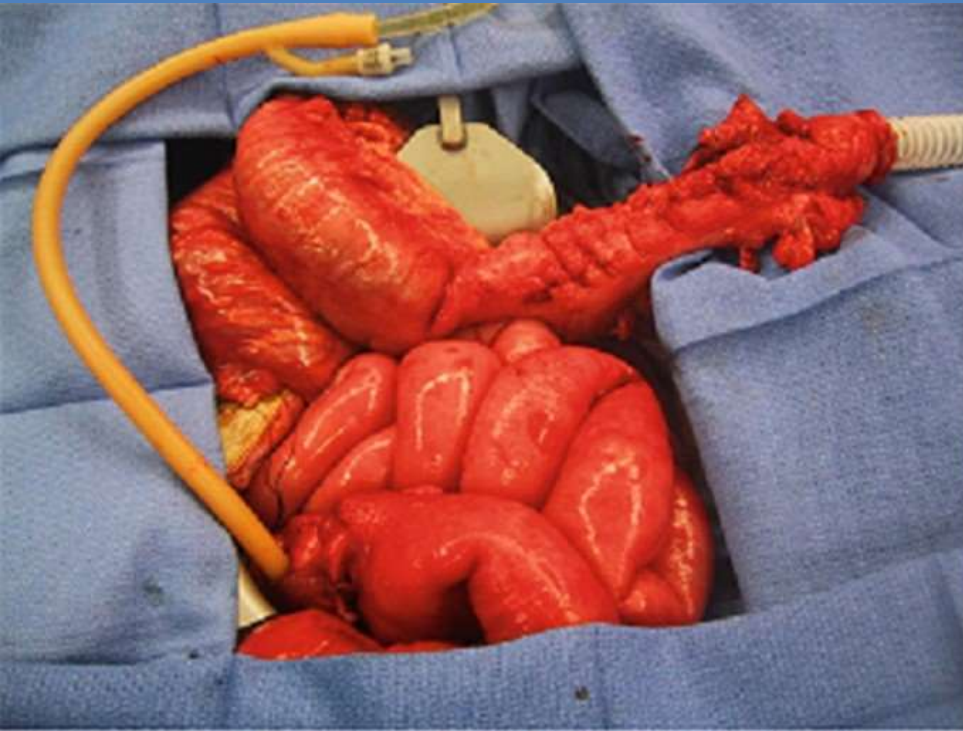
- 4 bottle PEG solution in 4 litre of fluid.
- 250 ml 15 min interval.
- Starting from 10 am.
- Ends at 2 pm.
- Liquid diet upto 8 pm.
- Then start saline.
- Enema if required.

Whole gut irrigation

- Use of NG tube.
- Dose-
 - Adult- 2 L/hr.
 - <5 yrs- 35ml/kg/hr.
- Continue irrigation until rectal effluent is clear (- 6 hrs).



On table lavage



What we do?

- No bowel preparation for-
 - Anorectal procedures.
 - Right sided colonic resection.
 - APR.
 - Emergency procedures.
- Bowel preparation for-
 - Left sided colonic resections.
 - AR.
 - LAR.
 - ULAR.
 - Colonoscopy.

Colonoscopy preparation

- Avoid low residual diet- 3 days before colonoscopy.
- Avoid solid food same day.

Bowel preparation

- Tab. Bisocadil phosphate.
 - 0+0+2- previous night.
- Mannitol 20% 500ml.
 - Previous noon.or
- 4-6 hrs before-2 dose of PEG solution
- Plenty of Liquid upto bed time.
- Avoid vegetables for 2-3 days.



Dark and
murky.

NOT OK



Brown and
murky.

NOT OK



Dark orange
and semi-clear.

NOT OK



Light orange
and clear.

ALMOST
THERE!



Yellow and
clear, like urine.

YOU'RE
READY!

Side effects of gut preparation

- Frequent stool.
- Nausea.
- Vomiting.
- Abdominal bloating.
- Cramping pain.
- Dehydration.
- Electrolyte imbalance.

Aim

- Constipated or impacted faecal matter.
- Preparation for an exam.
- Prior to surgery.
- Administration of drugs.

Types

- Retention enema.
 - Vol. Not >100ml.
 - eg.- prednisolone enema.
- Cleansing enema.
 - Tap water.
 - NS.
 - Soap water.
 - Hypertonic saline (fleet).
 - Mineral, olive or cottonseed.
- Distension reduction enema.
- Medicated enema.
 - Mesalamine, formaline.
- Disposable enema.
 - Fleet enema.

- Saline laxative.
- Contains sodium phosphates.
- Works by pulling water from the body into the bowel.
- Helps to soften the stool and cause a bowel movement.

A number of vehicles or aircraft operating together or under the same ownership."a fleet of ambulances took the injured to hospital"

Evacuant enema

- Soap jelly 50 ml+ 1 L water.
- NaCl 1 tsf+ ½ L water.
- Tap water.

Amount-

- Adults-500-1000 ml. (1 to 2 pint).
- Childrens- 250-500ml (0.5-1 pint).
- Infants-250ml or less.

M/A-

- Distension.
- Irritation.
- Stimulate peristalsis.

Precautions

- Not as a 1st line Rx of constipation.
- Never deliver >3 consecutive enemas.
- Not in a diarrhoea patient.
- With caution in arrhythmia & MI pt.-stimulate vagus n.-trigger arrhythmia.
- Not in a undiagnosed abdominal pain. Eg- appendicitis—rupture.
- Recent surgery of bowel.
- Per rectal bleeding or rectal prolapse.
- Don't force catheter against resistance.

Complications

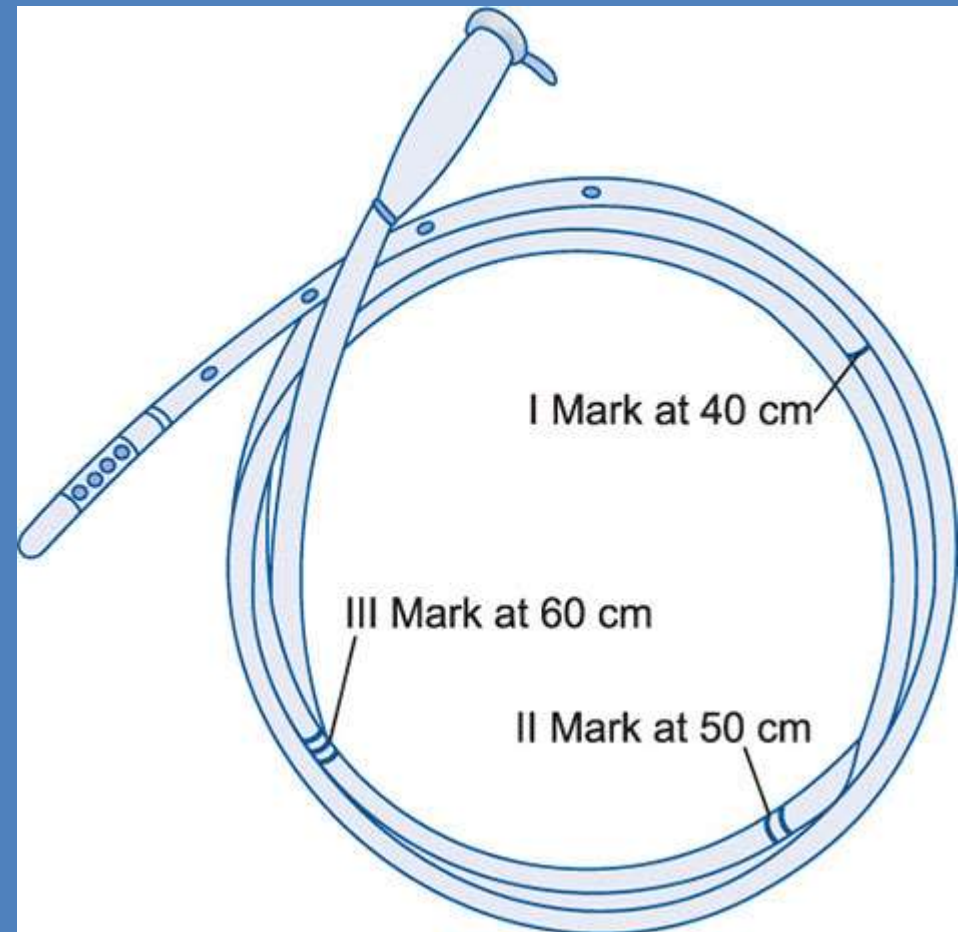
- Not so common.
- Irritation.
- Swelling.
- Redness.
- Bleeding.
- Prolapse.
- Dehydration.
- Perforation.
- Fluid overload- HF.
- Electrolyte imbalance.

What about pregnant or lactating?

- No problem.
- No risk for clean water enema.
- In pregnancy avoid enema containing herbs.



N-G tube



Lavage?

Irrigation or washing out
of an organ or cavity as
of the stomach or
intestine.

Types-

Peritoneal.

Bronchoalveolar.

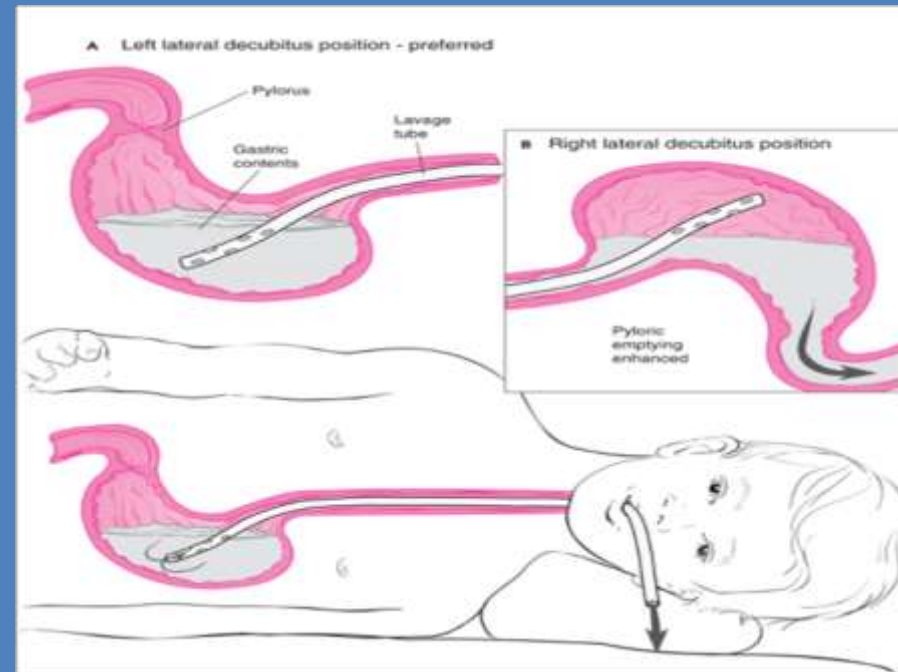
Colonic.

Gastric.



Gastric lavage

- With normal saline.
- Untill clear fluid comes out.
- Benefits-
 - Gastric decompression.
 - Increases muscle tone.
 - Reduce oedema.
 - Reduce the chance of bleeding.
 - Reduce chance of anastomotic leakage.





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ectalcare.info](http://www.Ferdauscolor
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