### The Gut

### common problems

- vomiting
- · diarrhoea
- · ulcers
- · ileus
- · colic
- · constipation
- · bloat

### vomiting

- fluids
- · (anti-emetics)

#### diarrhoea

- · fluids
- · motility reducers
- · (antibiotics)
- · (anti-inflammatories)
- · (wormers)

### ulcers

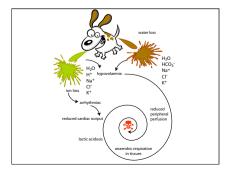
- · proton pump inhibitors
- H2 antagonists
- · coating agents

## colic

- · analgesics
- · fluids
- · motility reducers

## constipation

- · laxatives
- · (prokinetics)



#### fluids

- · oral best
- · iv if necessary
- · other routes
- sc not much use
- im no use
- ip can be dangerous
- intraosseous painful

#### oral fluids

- · tap water
- salt
- glucose / glycine
- · (starch)

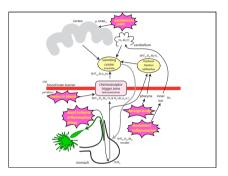
### iv fluids

- sodium lactate infusion (= Hartmann's solution = lactated Ringer's)
- · lot of others

### iv additives

- · KCI
- · NaHCO<sub>3</sub>





#### anti-emetics

- · phenothiazines

- perchlorphenazine

  dopamine antagonists

  metaclopramide

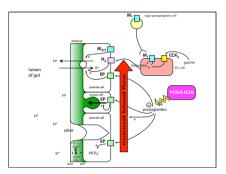
  droperidol
- 5HT3 antagonists
- ondansetron
- · (antihistamines)
- · (anticholinergics)

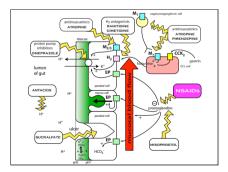
#### emetics

- · apomorphine
- xylazine
- mustard
- · saturated salt solutions

# ulcer drugs

- · anticholinergics
- · prostaglandins
- H<sub>2</sub> antagonists
- · proton pump inhibitors
- · antacids
- · local protectants
- · antibiotics





## anticholinergics

- M<sub>1</sub> antagonists
- pirenzepinenot atropine

### prostaglandins

- · PGE analogues
- misoprostol

#### antihistamines

- · H<sub>2</sub> antagonists
- cimetidine
- ranitidine
- famotidine

### proton pump inhibitors

- · omeprazole
- · pantoprazole
- · lansoprazole

#### antacids

- · aluminium
- hydroxide magnesium
- hydroxide
- carbonate
- oxide
- trisilicate · not much use

### protectants

- sucralfate
- · colloidal bismuth
- · (kaolin)
- · (pectin)

### gut motility

- · prokinetics
- metoclopramide
- erythromycin
- · spasmolytics
- anticholinergics
- opioids

### opioids

- · loperamide
- · diphenoxylate
- · (morphine)

#### antibiotics

- · not usually indicated
- · give if
- there is evidence of invasion
- a specific pathogen has been cultured

## pre & probiotics

· the future???

#### anti-inflammatories

- · inflammatory bowel disease
- sulphasalazine
- olsalazine
- mesalazine
- · not usually NSAIDs or steroids

#### laxatives

- enemas
- soapy water
- bulk forming laxatives
- · osmotic laxatives
- · lubricant laxatives
- · irritant laxatives

## bulk forming laxatives

- psyllium
- bran

### osmotic laxatives

- · lactulose
- · MgSO<sub>4</sub>

#### **lubricant laxatives**

- · liquid paraffin (= mineral oil)
- white soft paraffin (= petrolatum, Vaseline)
- · do NOT use
- paraffin oil (= kerosene)paraffin wax (= paraffin)

#### irritant laxatives

- rhubarb
- · senna

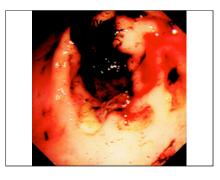




## what would you do?



- 8yr old
- · hip lameness
- on NSAIDs for 2
- now off food & miserable



### problem

ulcers

#### treatment

- · misoprostol?
- · ranitidine?
- · omeprazole?
- · stop NSAIDs?

#### the gut

- treatment of diarrhoea give fluids po if possible, iv if not, then possibly opioids
  do NOT give antibiotics unless bacteria are invading mucosa they often cause diarrhoea
- vomiting iv fluids, anti-emetics only for persistent vomiting
- ulcers H2 blockers, proton pump inhibitors or sucralfate not antascids or NSAIDs
- ileus metaclopramide or erythromycin
   colitis sulphasalazine