

LAST HOURS OF LIVING:	INTERVENTIONS
mouth care	<ul style="list-style-type: none"> • keep mucous membranes and teeth moist and clean using baking soda mouthwash q30–60 min prn • apply mouthwash and any medications with sponge swabs • do not insert fingers beyond the teeth (avoid bites) • avoid lemon-glycerine swabs • cover oral ulcers with topical anesthetics • dab candida with Nystatin suspension • a humidifier may reduce drying (be careful not to increase risk of respiratory infections)

COMPLEMENTARY THERAPIES

- relaxation therapy
- therapeutic touch

GASTRO-INTESTINAL PROBLEMS

ODYNOPHAGIA

Odynophagia = pain on swallowing.

PRESENTATION

Most often described as retrosternal pain associated with a sense of spasm or fullness. Usually made worse by swallowing fluids/food.

CAUSES

Infectious:

- candida (may occur without an oral infection)
- CMV
- herpes simplex/zoster

Other:

- esophageal ulcerations
- excess alcohol
- hiatus hernia
- hyperacidity, reflux
- radiation therapy
- spicy food
- stress

Malignancy:

- Kaposi's sarcoma
- lymphoma
- lift head of bed, lie in upright position

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

PROBLEMS	INTERVENTIONS
pain	<ul style="list-style-type: none"> • analgesics: <ul style="list-style-type: none"> – provide stepwise approach (see Pain) – NSAID's may be particularly helpful • anesthesia: <ul style="list-style-type: none"> – oxethazaine, aluminum and magnesium hydroxide mouthwash (Mucaine®) 15–30 mls tid-qid, rinse mouth, gargle, then swallow
gastroesophageal reflux heartburn, hyperacidity	<ul style="list-style-type: none"> • to neutralize excess acid: <ul style="list-style-type: none"> – Al or mg antacids, 15-30 mls po q2h prn (many available) – alginic acid (Gaviscon®) 10–20 mls or 2-4 tabs po qid pc + hs

- to reduce acid production:
 - ranitidine 150 mg po q12h
 - famotidine 20-40 mg po od, 10-20 mg iv q12h
 - omeprazole 20-40 mg po od
- to cover open esophageal/gastric ulcers; sucralfate 1 gm po qid ac+hs

COMPLEMENTARY THERAPIES

- chiropractic – diaphragm release for hiatus hernia
- relaxation therapy
- therapeutic touch

DYSPHAGIA

Dysphagia = difficulty swallowing.

PRESENTATIONS

May eat and drink less. Foods or thickened fluids may be easier to swallow than thin fluids. May not be swallowing, even saliva.

CAUSES

Infectious:

- candidiasis
- CMV
- herpes simplex
- herpes zoster
- neuromuscular:
 - HIV encephalopathy
 - PML

Other:

- acid reflux
- asthenia
- irritants:
 - alcohol
 - spicy foods
- poor mastication
- ulcers

Malignant:

- Kaposi's sarcoma
- lymphoma

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- always ensure that the person can protect his/her airway before giving oral fluids, food or medications
- reduce or discontinue irritating medications/substances
- minimize oral medications
- change to an alternate route of drug/fluid administration if necessary
- consult nutritionist for alternate fluids/foods, thickeners, etc.
- consider swallowing assessment (consult speech pathologist)
- manage associated heartburn, hyperacidity gastroesophageal reflux (see Odynophagia)

PROBLEMS	INTERVENTIONS
slow to swallow, fluids/food “sticking”, poor gastro-esophageal sphincter tone	<ul style="list-style-type: none"> to increase peristalsis: <ul style="list-style-type: none"> metoclopramide 5–10 mg po, im, iv tid-qid, 1/2 hr ac + hs, or domperidone 5–20 mg po tid-qid, 1/2 hr ac + hs cisapride 5–10 mg po tid-qid, 1/4 hr ac + hs or 20 mg po bid
poor food intake	<ul style="list-style-type: none"> establish whether fluids, thickened fluids or soft foods are easier to swallow (consult speech pathologist) if ability to swallow and/or aspiration are of concern, test ability to swallow with a small quantity of water before each feeding cool, soft foods may be easiest to swallow small, frequent meals feed slowly, in upright position. If assistance is required, the feeder should practice good feeding techniques do not force feed catheters may be used to introduce nutrition past the epiglottis when the person is aspirating frequently naso-gastric feeding tubes may be needed if long term support is required (not to be used if aspiration is a problem) consult nutritionist
dysphagia in children	<ul style="list-style-type: none"> acute dysphagia may require a limited course of total parenteral nutrition (TPN) to avoid or reduce weight loss during an acute episode

LAST HOURS OF LIVING	INTERVENTIONS
loss of gag, loss of ability to swallow	<ul style="list-style-type: none"> loss of the gag reflex and the ability to swallow is one of cardinal signs that death is occurring families and caregivers must be instructed when to stop oral intake. Avoid aspiration and the possible guilt that someone may have caused the death fluids may build-up in the back of the throat and present as gurgling and crackling as air moves through the thick mixture (known as the “death rattle”). This is often perceived as choking. Provide education and support to settle those who find the sound distressing management should include: <ul style="list-style-type: none"> no further administration of fluids and food keep mucous membranes moist, not wet (see Dehydration) scopolamine (hyoscine) may decrease saliva production and reduce the amount of fluid collecting in the back of the throat: <ul style="list-style-type: none"> start with scopolamine 0.3-0.6 mg sc q4-8h prn for first 12-16 hrs and apply 1–2 Transderm-V® patch(es) behind alternating ears q72h (takes 12 hours to work). Atropine is not indicated as it may lead to cardiac, respiratory and/or CNS stimulation use postural drainage or repositioning to clear or move fluids (to get over the “coffee percolator-like” effect) in extreme or re-occurring situations, i.e. PML, oropharyngeal or nasopharyngeal suctioning may be needed (may be very stimulating/irritating)

COMPLEMENTARY THERAPIES

- massage with relaxing oil in lateral lying position, i.e. neroli oil
- relaxation therapy

ABDOMINAL PAIN**PRESENTATIONS**

May be constant, intermittent (colic, cramps), burning, associated with food or not, radiate into back, chest, shoulder or gonads.

CAUSES**APPENDICITIS (RARE)**

- **Infectious**
- **Malignant:**
 - Kaposi's sarcoma, lymphoma
- **Other:**
 - fecolith

CHRONIC PELVIC INFLAMMATORY DISEASE

- **Infectious:**
 - salpingitis

BOWEL OBSTRUCTION

- **Infectious:**
 - MAC
- **Malignant:**
 - Kaposi's sarcoma
 - lymphoma
- **Other:**
 - stool

ENTERITIS

- **Infectious:**
 - campylobacter
 - cryptosporidiosis
 - MAC
 - salmonella
 - shigella

CHOLECYSTITIS

- **Biliary tract obstruction:**
 - Kaposi's sarcoma
 - stones
 - lymphoma
- **Infectious:**
 - campylobacter fetus
 - candida
 - CMV
 - cryptosporidiosis
 - MAC

SPLENIC

- **Infectious:**
 - MAC
- **Malignant:**
 - lymphoma

PANCREATITIS

- **Infectious:**
 - CMV
 - cryptococcosis
 - MAC
- **Drug Induced:**
 - alcohol
 - corticosteroids
 - ddI
 - pentamidine

PERITONITIS

- **Infectious:**
 - gram negative pathogens
 - histoplasmosis
 - MAC
 - pneumocystis
 - TB
- **Malignant:**
 - Kaposi's sarcoma
 - lymphoma
- **Other:**
 - bowel perforation

RETROPERITONEAL ADENOPATHY

- **Infectious:**
 - MAC
 - TB
- **Malignant:**
 - Kaposi's sarcoma
 - lymphoma

HEPATITIS

- **Infectious:**
 - hepatitis A, B, C, D
 - MAC
- **Malignant:**
 - lymphoma

ILEUS

- **Infectious:**
 - HIV
 - other
- **Drug Induced:**
 - anesthesia
 - opioid

COLITIS

(may lead to bowel perforation)

- **Infectious:**
 - clostridium difficile
 - CMV
 - histoplasmosis

OTHER

- ascites
- gastritis
- organomegaly
- ulcers:
 - duodenal
 - gastric

MESENTERIC LYMPH NODE ENLARGEMENT

- **Infectious:**
 - MAC
- **Malignant:**
 - Kaposi's sarcoma
 - lymphoma

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- in many, the exact etiology may not be determined
- lab results may be misleading, i.e. low or normal WBC count in presence of infection
- do not assume that a perforated viscus is irreversible; laparotomy may be appropriate
- persons with HIV / AIDS are not at increased risk for abdominal wound complications

PROBLEMS	INTERVENTIONS
pain	<ul style="list-style-type: none"> • provide stepwise analgesia (see Pain)
bloating, distention, flatulence	<ul style="list-style-type: none"> • may need NG or rectal tube (with or without suction) • may need to alter or restrict diet, remove lactose • antacids containing simethicone • homeopathic: lycopodium, start with 6 ch. qid ac + hs, increase to 30 ch tid ac, if needed
colic, cramps	<ul style="list-style-type: none"> • for obstruction that you believe to be reversible: <ul style="list-style-type: none"> – codeine 30–60 mg po, pr, sc q4h prn – for opioid naive: morphine 5–10 mg po, pr, sc q4h prn (or hydromorphone equivalent) – for those on opioids: increase morphine (or hydromorphone) by 25–50% or add codeine – may also add: <ul style="list-style-type: none"> – diphenoxylate (Lomotil®) 2.5–5.0 mg po q4–6h prn, max 20mg/24hrs – loperamide (Imodium®) 2–4 mg po q4–6h prn, max 16 mg/24hrs

	<ul style="list-style-type: none"> – hyoscine butylbromide (Buscopan®) 10–20 mg po, sc, im, iv 1-5 times/24 hrs – dicyclomine (Bentylol®) 10-20 mg po tid-qid or 20 mg im q4-6h prn • for obstruction that you believe to be irreversible: <ul style="list-style-type: none"> – use diphenoxylate and/or loperamide as above, routinely, not prn – may also add opioids as above • for irritable bowel symptoms: <ul style="list-style-type: none"> – trimebutine (Modulan®) 100-200 mg po tid ac – homeopathic: staphysagria, start with 6 ch. qid ac + hs, increase to 30 ch tid ac, if needed • for intense cramping: <ul style="list-style-type: none"> – avoid foods that may cause gas or cramps, i.e. beans, cabbage, broccoli, cauliflower, highly spiced foods or too many sweet or carbonated drinks – homeopathic: colocynth, same dosage as staphysagria above
peritoneal pain (rebound)	<ul style="list-style-type: none"> • provide stepwise analgesia (see Pain) • NSAID's may be very helpful
visceral pain, organomegaly	<ul style="list-style-type: none"> • provide stepwise analgesia (see Pain) • steroids may be very helpful: <ul style="list-style-type: none"> – prednisone 10-80 mg po od – dexamethasone 1-8 mg po, iv, im, sc q6h • NSAID's may also be helpful

COMPLEMENTARY THERAPIES

- relaxation therapy
- abdominal massage to reduce tension in abdominal wall
- aromatherapy-fennel or camomile (to reduce abdominal tension)
- therapeutic touch

NAUSEA, VOMITING, RETCHING

PRESENTATION

Nausea may be much more distressing than vomiting. Vomiting without associated nausea is likely to be due to a motility problem or mechanical obstruction. Retching may occur without nausea or vomiting.

CAUSES

Often multi-factorial and subjective (**10 M's of emesis**):

PROBLEMS	CAUSES
cerebral Masses, increased intracranial pressure, nerve dysfunction	<ul style="list-style-type: none"> • lymphoma of brain • toxoplasmosis
Meningeal irritation, stimulation, increased intracranial pressure	<ul style="list-style-type: none"> • infectious • space occupying lesions
Mental anxiety	<ul style="list-style-type: none"> • heightened by: <ul style="list-style-type: none"> – dislikes, i.e. foods, activities – fear and fantasy – smells

vestibular stimulation, Movement	<ul style="list-style-type: none"> • medications, especially opioids, i.e. morphine • motion sickness
Medications acting on chemoreceptor trigger zone	<ul style="list-style-type: none"> • chemotherapy • opioids
Mechanical obstruction, intra and/or extra luminal	<ul style="list-style-type: none"> • upper GI tract: <ul style="list-style-type: none"> – malignancies, i.e. Kaposi's sarcoma, lymphoma producing gastric outlet obstruction, i.e. squashed stomach syndrome • lower GI tract: <ul style="list-style-type: none"> – faeces, bowel obstruction – hemorrhoids – malignancies, i.e. Kaposi's sarcoma, lymphoma, squamous cell carcinoma
altered GI Motility, slow swallowing, gastric emptying, ileus	<ul style="list-style-type: none"> • decreased peristalsis: <ul style="list-style-type: none"> – medications, especially: <ul style="list-style-type: none"> • anti-cholinergics • opioids – PML – post anaesthetic • increased peristalsis: <ul style="list-style-type: none"> – infection/inflammation, especially with fever – obstruction • hyper active gag reflex: <ul style="list-style-type: none"> – cough – hiccups
Mucosal irritation, esophageal or gastric	<ul style="list-style-type: none"> • infections: <ul style="list-style-type: none"> – candidiasis – CMV • medications: <ul style="list-style-type: none"> – ASA, NSAID's – steroids • hyperacidity, reflux, hiatus hernia • blood in stomach
Metabolic	<ul style="list-style-type: none"> • dehydration • electrolyte imbalance • liver failure, obstruction • uremia
Myocardial	<ul style="list-style-type: none"> • CHF • ischemia • myopathy • pericarditis

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- restrict and/or hold fluid and food intake, if appropriate
- fluid replacement should be the primary focus of attention as dehydration (salt and water loss) is a frequent complication:
 - encourage electrolyte balanced fluids, i.e. Gatorade®, soups
- avoid fried, greasy foods, alcohol or medications that may cause nausea or vomiting
- position person upright (sit or elevate head to a semi-sitting position)
- provide anti-emetics 1/2 hr before meals

PROBLEMS	INTERVENTIONS
cerebral Masses	<ul style="list-style-type: none"> decrease intra-cranial pressure: <ul style="list-style-type: none"> dexamethasone 1–8 mg po, iv, im, sc q6h to reduce pressure acutely, mannitol 100 mls of 10 or 20% solution may be given as a rapid iv infusion once or twice decrease stimuli
Meningeal irritation	<ul style="list-style-type: none"> manage increased intra-cranial pressure as above in metastases manage headache to influence central chemoreceptor zone <ul style="list-style-type: none"> prochlorperazine 5–20 mg po, pr, im, iv q4h prn haloperidol 0.5–5.0 mg po, sc, im q4–6h prn chlorpromazine 10–25 mg po, pr, im q6–12h prn nabilone 1–2 mg po q6-12h prn
Mental anxiety and fear	<ul style="list-style-type: none"> benzodiazepines may be very useful: <ul style="list-style-type: none"> lorazepam 0.5–2 mg po, sl q6–8h prn diazepam 2–10 mg po q6-8h clonazepam 0.25–2 mg po q12h manage hyperactive gag reflex (see Cough) relaxation therapy
vestibular stimulation (Movement)	<ul style="list-style-type: none"> use prophylaxis before activity dimenhydrinate 50–100 mg po, pr, im, iv q4–6h scopolamine 1.5 mg transdermal patch behind alternating ears q72h (takes 12 hours for initial effect) scopolamine 0.3–0.6 mg sc q4–8h prn meclizine (Bonamine®) 25-100mg po od-qid cyclizine (Marzine®) 50mg im q8h
Medications	<ul style="list-style-type: none"> to influence central chemoreceptor zone (see Meningeal irritation above)
Mechanical obstruction, upper GI tract	<ul style="list-style-type: none"> restrict or hold oral fluid intake, hold solid food intake NG tube and/or suction may be appropriate for partial obstruction with altered mobility consider peristaltic stimulants (see altered GI Motility below) to control heartburn, hyperactivity (see Odynophagia) may also add a centrally acting anti-emetic (see Meningeal irritation above)
Mechanical obstruction, lower GI tract	<ul style="list-style-type: none"> restrict or hold oral fluid intake, hold solid food intake NG tube and/or suction may be very appropriate for high intestinal obstructions, reduce hepatic/pancreatic secretions using scopolamine 0.3–0.6 mg sc q4–8h prn or a continuous infusion 0.1–0.2 mg sc q1h treat reflux and/or hyperacidity as above for upper GI tract obstruction treat colic (see Abdominal Pain) treat reversible causes of obstruction (see Constipation/Bowel obstruction) may also add one of: <ul style="list-style-type: none"> a centrally acting anti-emetic (see Meningeal irritation above)

<p>altered GI Motility (Gastric stasis, ileus)</p>	<ul style="list-style-type: none"> to stimulate peristalsis, tighten the lower esophageal sphincter, relax the pyloric sphincter: <ul style="list-style-type: none"> metoclopramide 5–10 mg po, im, iv tid-qid, 1/2 hr ac + hs domperidone 5–20 mg po tid-qid, 1/2 hr ac + hs cisapride 5–10 mg po tid-qid, 1/2 hr ac + hs or 20mg po bid (may be dangerous in complete obstruction) if caused by opioids, consider alternate opioid, i.e. hydromorphone
<p>Mucosal irritation</p>	<ul style="list-style-type: none"> treat underlying infections low spice, low acid food encourage to remain sitting 30 minutes after eating to control reflux: and reduce excess acid production (see Odynophagia) for NSAID induced mucosal irritation: <ul style="list-style-type: none"> ensure adequate hydration misoprostol 100–200 µg q6h consider holding or discontinuing NSAID H₂ receptor antagonists are not indicated unless excess acid is also a problem if not controlled, may also add one of: <ul style="list-style-type: none"> prochlorperazine 5–10 mg po, pr, im, iv q4h prn, or haloperidol 0.5–4.0 mg po, sc, im q4–6h prn, or chlorpromazine 10–20 mg po, pr, im q4–6h prn
<p>Metabolic</p>	<ul style="list-style-type: none"> correct electrolyte imbalance and dehydration (see Dehydration) correct hypercalcemia: <ul style="list-style-type: none"> rehydrate with N/S, using furosemide as needed to ensure adequate output steroids may be added: dexamethasone 1–8 mg po, iv, im sc q6h if not controlled, add one of prochlorperazine, haloperidol, chlorpromazine (see Mucosal irritation above)
<p>Myocardial</p>	<ul style="list-style-type: none"> treat underlying cardiac causes treat cardiac pain (see Chest/cardiac pain) if not controlled, add one of prochlorperazine, haloperidol, chlorpromazine (see Mucosal irritation above)

COMPLEMENTARY THERAPIES

- acupuncture
- aromatherapy: extract of wild strawberry
- homeopathy: ipecac 6 ch qid ac + hs, increase to 12 ch qid to 30 ch tid if needed
- relaxation therapy
- therapeutic touch

CONSTIPATION, BOWEL OBSTRUCTION

Tenesmus = ineffectual and painful straining at stool or in urinating.

PRESENTATION

Reduced numbers of bowel movements with increased stool consistency. Overflow diarrhea mixed with hard stool.

May lead to difficulty defecating. In extreme, may lead to little or no stool movement, fecal impaction, bowel obstruction, overflow incontinence and/or tenesmus

CAUSES

Infectious:

- HIV autonomic neuropathy

Malignancy:

- Kaposi’s sarcoma
- lymphoma

Other:

- ileus:
 - post operative
 - narcotic bowel syndrome
- lack of mobility (inability to get to bathroom or other equipment)
- lack of privacy
- medications:
 - opioids
 - anti-cholinergics
- metabolic:
 - hypercalcemia
 - hypokalemia
- spinal cord compression
- dehydration
- peri-anal problems

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- establish the person’s normal bowel habit, current number of bowel movements/week, consistency, colour and volume of stool
- mobilize as tolerated
- maintain adequate hydration (see Dehydration)
- maintain regular bowel routine, especially if the underlying causes are neurological
- toilet regularly, strongest peristalsis is in early morning (7-9am)
- sit upright if possible
- maintain good peri-anal care (see Peri-anal problems)
- for laxatives, use po routes first. If not adequate after 2-3 days, use rectal suppositories. If still no results, use enemas

APPROACHES	INTERVENTIONS
increase bulk (except if opioid related)	<ul style="list-style-type: none"> • psyllium • fiber, bran, pectin • increase fluid intake (see Dehydration)
soften stool	<ul style="list-style-type: none"> • sodium or calcium docusate 100–200 mg po od-tid • osmotic cathartics: <ul style="list-style-type: none"> – magnesium salts, i.e. Phillips’ Milk of Magnesia® 15-30 mls po od-qid – lactulose 15–30 mls po od q8h
reduce bloating, distention, gas	<ul style="list-style-type: none"> • reduce air swallowing by educating, behaviour modification • may need to alter or restrict diet, remove lactose • may need NG or rectal tube (with or without suction) • homeopathic: lycopodium, start with 6 ch qid ac + hs, increase to 30 ch tid ac, if needed • antacids with simethicone
stimulate peristalsis (ileus, narcotic bowel syndrome)	<ul style="list-style-type: none"> • bowel irritants: <ul style="list-style-type: none"> – prune juice 120-240 mls od-bid – senna tablets or tea 1–2 po od-bid – bisacodyl 10 mg pr od-tid – cascara 5-10 ml + magnesium hydroxide + mineral oil (Magnolax®) 25 mls prn

	<ul style="list-style-type: none"> propulsive medications: <ul style="list-style-type: none"> metoclopramide 5–10 mg po, im, iv tid-qid, 1/2 hr ac + hs domperidone 5–20 mg po tid-qid, 1/2 hr ac + hs cisapride 5–10 mg po tid-qid, 1/4 hr ac + hs or 20 mg po bid <p>Caution: may be dangerous if mechanical obstruction present</p>
relax and/or anaesthetize anal sphincter	<ul style="list-style-type: none"> sitz bath digital sphincter stimulation glycerin suppositories 1 pr od-tid lidocaine spray or jelly (2% unidose syringes) dibucaine 1% (Nupercainal®), apply as directed post bowel movement, apply silicone ointment to rectal area
disimpaction	<ul style="list-style-type: none"> digital extraction after topical anaesthesia enemas: <ul style="list-style-type: none"> sodium phosphate (Fleet®) tap water or saline mineral or peanut oil (ask about peanut allergy first) 2 bottles of sodium phosphate + 50 mls hydrogen peroxide (added at the last minute)

COMPLEMENTARY THERAPIES

- therapeutic touch
- homeopathy:
 - moderate, with cramping: staphysagria 6 ch tid ac
 - extreme, no movement: alumina 30 ch bid
 - other pattern: consult practitioner

DIARRHEA

Diarrhea = Stools that are looser than normal in consistency.

PRESENTATIONS

May occur with increased frequency:

- flatulence
- multiple bowel movements/day
- hemorrhoids
- fissures
- rectal bleeding
- watery bowel movements
- cramps/colic

CAUSES

Infectious:

- lospora
- cryptosporidium
- microsporidium
 - MAC
 - salmonella
 - other enteric pathogens

Other:

- GI bleeding
- malabsorption:
 - high osmotic feeds
 - HIV enteropathy
 - lactose intolerance
- medications
- obstruction with overflow incontinence
- rectal incontinence
- stress

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- establish the person’s normal bowel habit, current number of bowel movements/day, consistency, colour and volume of stool and fluid
- maintain adequate hydration (see Dehydration)
- ready access to a bathroom or commode
- use incontinent devices to prevent soiling
- deodorize
- maintain dignity, privacy, especially while toileting
- maintain good peri-anal care (see Peri-anal problems)

APPROACHES	INTERVENTIONS
diet, lactose intolerance	<ul style="list-style-type: none"> • small, frequent, low fat, low lactose meals: <ul style="list-style-type: none"> – for lactose intolerance, use lactase enzyme 1–4 tablets 15–30 minutes before meals • if cramping is a problem, avoid foods that may cause gas or cramps, i.e. beans, cabbage, broccoli, cauliflower, highly spiced foods or too many sweet or carbonated drinks
increase bulk	<ul style="list-style-type: none"> • psyllium • fiber, bran, pectin
manage transient diarrhea	<ul style="list-style-type: none"> • attapulgate (Kaopectate®) 30 mls or 2 tabs prn • aluminum antacids (Amphogel®) 15-30 mls po q4h prn • bismuth salts (Pepto Bismol®) 15-30 mls po bid-qid
reduce intestinal secretions	<ul style="list-style-type: none"> • octreotide (Sandostatin®) 100-500 µg sc q8h
reduce peristalsis	<ul style="list-style-type: none"> • opioids: <ul style="list-style-type: none"> – diphenoxylate 2.5-5.0 mg po q4–6h prn, max 20 mg/24 hrs – loperamide 4 mg po first dose then 2-4 mg after each unformed stool, max 16 mg/24 hrs Note: under careful supervision, might increase maximum doses of diphenoxylate and loperamide) – codeine 30-60 mg po, im q4h prn – strong opioids: <ul style="list-style-type: none"> – for opioid naive: morphine 5-10 mg po, pr, sc q4h prn (or hydromorphone equivalent) – for those on opioids: increase morphine (or hydromorphone) by 25–50% or add codeine

COMPLEMENTARY THERAPIES

- relaxation therapy
- therapeutic touch
- homeopathy:
 - periodic diarrhea, with colic: DIA complex prn
 - gripping pain: cuprum arsenicum 6 ch tid
 - other patterns: many effective, symptom specific remedies, consult practitioner

BOWEL INCONTINENCE

PRESENTATION

Loss of sphincter competence that leads to consistent loss of stools.

CAUSES

Infectious:

- autonomic neuropathy:
 - CMV
 - HIV

Malignancy:

- cord compression:
 - Kaposi's sarcoma
 - lymphoma
 - squamous cell carcinoma

Other:

- fecal impaction (overflow incontinence)
- peri-anal problems
- post traumatic loss of sphincter competence
- delirium
- dementia

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- increase bulk in the diet
- toilet regularly with appropriate privacy
- use diapers and protective bed coverings as preferred by the individual
- anticipate pain (see Peri-anal pain)
- if incontinence appears early in HIV disease and will be an ongoing, unmanageable problem, consider a bypass colostomy

PERI-ANAL PAIN

PRESENTATION

May be increased with bowel movements, rectal manipulation/penetration, sitting or urination.

Bowel movements or urination may lead to tenesmus.

CAUSES

Infectious:

- abscess
- candida
- CMV
- herpes simplex or zoster
- warts
- other sexually transmitted diseases

Other:

- fissures
- fistulae
- hemorrhoids
- inflammatory strictures

Malignant:

- Kaposi's sarcoma
- lymphoma
- squamous cell carcinoma

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- sitz baths may improve hygiene and peri-anal pain
- cover open fissures, ulcers with mineral oil or zinc oxide ointment (to reduce contact with oxygen, which produces the pain)
- sit on soft cushions, or foam cushions with cut-outs (or donuts) to reduce discomfort
- maintain hydration (see Dehydration)

APPROACHES	INTERVENTIONS
manage pain	<ul style="list-style-type: none"> • to anaesthetize locally: <ul style="list-style-type: none"> – lidocaine 10% endotracheal spray, tid-qid, before or after bowel movements – lidocaine 2% jelly or 5% ointment, tid-qid, before or after bowel movement – dibucaine (Nupercainal®) cream, ointment or suppositories, tid-qid, before or after bowel movements • selective nerve blocks (see Nerve blocks) • provide stepwise analgesia (see Pain and Neuropathic Pain) • may need to bypass painful area <ul style="list-style-type: none"> – rectal tube – colostomy if prognosis warrants the procedure
reduce inflammation	<ul style="list-style-type: none"> • Burrow's compresses • consider steroids: <ul style="list-style-type: none"> – prednisone 10-60 mg po od – dexamethasone 1-4 mg po, iv, im, sc q6h
soften stool	<ul style="list-style-type: none"> • diet, increased fiber, bran, pectin • sodium or calcium docusate 100-200 mg po bid-tid

COMPLEMENTARY THERAPIES

- homeopathy:
 - internal hemorrhoids: collubrina 6 ch qid ac + hs (stimulates portal circulation)
 - external hemorrhoids: aescylus hippocastrum 6 ch qid ac + hs
- hydrotherapy
 - alternate hot and cold water over region using personal shower attachment
 - otherwise, alternate warm compresses and ice packs

PERI-ANAL PROBLEMS

PRESENTATION

May include:

- bleeding
- fissures
- hemorrhoids
- superficial ulcerations, lesions
- discharges
- fistulae
- pruritis

CAUSES

Infectious:

- herpes simplex or zoster
- CMV
- warts
- candidiasis
- other sexually transmitted diseases
- abscess

Other:

- stress
- loss of anal sphincter competence
- inflammatory strictures

Malignant:

- Kaposi's sarcoma
- lymphoma
- squamous cell carcinoma

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- use sitz baths to improve peri-anal hygiene and decrease discomfort
- sit on soft or foam cushions with cut-outs (or donuts) to remove pressure from the peri-anal area
- prevent constipation (see Constipation)
- incontinence device if required
- provide absorbant pad if discharge present
- moistened rectal wipes for hygiene and comfort (avoid wipes with alcohol)

PROBLEMS	INTERVENTIONS
bleeding	<ul style="list-style-type: none"> • compression • silver nitrate sticks for small, accessible bleeding spots • (see Bleeding)
fissures, hemorrhoids	<ul style="list-style-type: none"> • relieve pressure • stool softeners (see Constipation/Bowel obstruction) • astringents, i.e. zinc sulphate with/without pramoxine • topical hydrocortisone
pruritis	<ul style="list-style-type: none"> • topical corticosteroids (do not apply to herpetic lesions) • topical anesthetics (see Peri-anal pain)
ulceration	<ul style="list-style-type: none"> • acyclovir 200-800 mg po 5 times/day. • Burrow's compresses • protect with silicone cream, zinc oxide ointment, etc.