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# Gastro-intestinal symptoms

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# Outline

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- ❖ Nausea
  - ❖ Vomiting
  - ❖ Intestinal Obstruction
  - ❖ Anorexia
  - ❖ Dysphagia
  - ❖ Constipation
  - ❖ Diarrhoea
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# Symptom Control

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- ❖ Individualised approach
  - ❖ Comprehensive assessment
  - ❖ Effective communication
  - ❖ Education and reassurance
  - ❖ Encourage participation
  - ❖ Comprehensive reassessment
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# Aetiology

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- ❖ Disease
  - ❖ Treatment
  - ❖ Debility
  - ❖ Concurrent disorder
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## Definitions

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- ❖ Nausea is an unpleasant sensation experienced in the back of the throat and the epigastrium that may or may not culminate in vomiting.
  - ❖ Vomiting is the forceful expulsion of the contents of the stomach through the oral or nasal cavity.
  - ❖ Retching is the unsuccessful attempt to vomit
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# Assessment

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- ❖ History: timing of symptoms, food and fluid intake, medication use, pain, bowel habit, urinary symptoms
  - ❖ Examination: Hydration, infection, jaundice, neurological signs, abdominal signs, rectal examination.
  - ❖ Investigations: Urea and electrolytes, corrected serum calcium level, liver function tests, FBC and differential, urine culture, abdominal ultrasound/X-ray, endoscopy and CT/MRI scan
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# Management

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- ❖ Assess for and treat underlying cause
  - ❖ Use anti-emetics
    - ❖ before vomiting starts
    - ❖ in adequate dose
    - ❖ in combination if necessary
    - ❖ by parenteral or rectal route if necessary
  - ❖ Reassess
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## Reversible causes

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<b>Cause</b>	<b>Management</b>
Hypercalcaemia	Rehydration / bisphosphonates
Infection	Antibiotics
Raised intracranial pressure	Corticosteroids
Gastric irritation	Stop NSAIDs, H2 antagonist, PPI
Constipation	Rectal measures / laxatives
Anxiety	Explanation, reassurance, anxiolytics

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## Reversible causes

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<b>Mechanisms</b>	<b>Drugs</b>
CTZ activation	Opioids, digoxin, cytotoxics, antibiotics, anticoagulants
Gastric irritation	NSAIDs, iron, cytotoxics, antibiotics
Gastric stasis	Opioids, tricyclics, phenothiazines, anticholinergics

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## Anti-emetics

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- ❖ Identify the likely cause
  - ❖ Identify the pathway(s) involved
  - ❖ Identify the neurotransmitter(s) involved
  - ❖ Choose the most potent receptor antagonist
  - ❖ Choose the appropriate route
  - ❖ Titrate the dose
  - ❖ If symptoms persist re-assess
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# Anti-emetics

Commonly used anti-emetics				
Drug	Oral dose (PR dose)	Stat dose/prn dose	CSCI/24h	
Cyclizine	50mg 4-6 hrly	50mg PO/SC	50-100mg	
Domperidone	10-20mg tds/qds (30-60mg tds/qds)			
Haloperidol	1.5 -3mg od/bd	1.5mg 1.25 – 2.5mg SC	2.5 – 5mg	
Levomepromazine	3-6mg bd/on	3mg 2.5 – 6.25mg SC	6.25-25mg	
Metoclopramide	10-20mg tds/qds	10mg PO/SC	30-80mg	
Hyoscine butylbromide	20mg qds	20mg SC	20-100mg	
Hyoscine hydrobromide	150-300mcg bd/tds 1mg/72 h TD	400mcg	0.4-2.4mg	

## Malignant Bowel Obstruction

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- ❖ Common complication in patients with end-stage cancer
  - ❖ Abdominal or pelvic primary particularly at risk
  - ❖ Reported frequency ranges from 5% to 42% in advanced ovarian cancer and from 4% to 24% in advanced colorectal cancer.
  - ❖ Bowel obstruction may be partial or complete and at single or multiple sites
  - ❖ Small bowel is more commonly involved than the large bowel
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# Malignant Bowel Obstruction

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<b>Differentiating the location of a bowel obstruction</b>		
Symptom	Proximal bowel	Distal bowel
Vomiting	Bilious, watery, large amounts, no to little odour	Particulate, small volumes, foul odour, may be absent
Pain	Early symptom, peri-umbilical, short intermittent cramps	Late symptom, localised, deep visceral pain, long intervals between cramps, often described as cramps
Abdominal distension	May be absent	Present
Anorexia	Always	May not be present

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## **Surgery: poor prognostic factors**

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- ❖ Age >65
  - ❖ Cachexia
  - ❖ Poor performance status
  - ❖ Previous RT to abdo/pelvis
  - ❖ Recurrent ascites
  - ❖ Diffuse intraperitoneal disease
  - ❖ Multiple levels of obstruction
  - ❖ Low serum albumin
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# Stents

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- ❖ Self expanding metal stents
  - ❖ Definitive treatment or decompress bowel to allow later surgery
  - ❖ Level of obstruction
    - ❖ Gastric outlet
    - ❖ Proximal small bowel & colon
  - ❖ Single level of obstruction only
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# Palliation

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- ❖ Opioids
  - ❖ Anticholinergics
  - ❖ Antiemetics
  - ❖ Corticosteroids
  - ❖ Somatostatin analogue
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# Anorexia

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- ❖ Anorexia / cachexia syndrome is a complex metabolic process found in many end-stage illnesses and characterised by loss of appetite, weight loss and tissue wasting.
  - ❖ Affects up to 80% of patients with advanced cancer and causes both physical and psychological distress.
  - ❖ Secondary ACS results from cancer-related barriers that reduce dietary intake, such as nausea/vomiting, mucositis, changes in taste/smell from chemotherapy.
  - ❖ ACS is often associated with other symptoms, including early satiety, fatigue and change in body image
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# Anorexia

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- ❖ Exclude reversible causes (e.g. pain, depression, nausea, vomiting, constipation and dysphagia)
  - ❖ Exclude exacerbating factors (e.g. odours, delayed gastric emptying)
  - ❖ Check for oral problems (e.g. xerostomia, ill fitting dentures, ulcers, candidiasis)
  - ❖ Find out about patient and carer perspectives on weight, body image, nutrition, dietary intake.
  - ❖ Assess psychosocial aspects
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# Anorexia

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- ❖ Prevention or early identification and treatment of contributory symptoms are important strategies.
  - ❖ The psychological impact on the patient and care should be acknowledged and ongoing discussion and support are needed.
  - ❖ Supplementary drinks can help selected patients after careful assessment of nutritional status, prognosis, and alternative options.
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# Anorexia

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## **Corticosteroids for anorexia**

Established role in short-term improvement of appetite.

Rapid effect, but tends to decrease after 3-4 weeks.

May also reduce nausea, and improve energy/ general feeling of well being.

No significant effect on nutritional status.

Starting dose: oral dexamethasone 4mg or prednisolone 30mg in the morning.

Consider need for a proton pump inhibitor.

Consider and explain adverse effects (e.g. fluid retention, candidiasis, myopathy, insomnia, gastritis)

Prescribe for 1 week, if no benefit, stop. If helpful, reduce to lowest effective dose; review regularly and withdraw if no longer improving symptoms.

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# Anorexia

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## **Progestogens for anorexia**

Improve appetite and increase weight in patients with cancer.

Take a few weeks to take effect but benefit more prolonged than steroids.

More appropriate for patients with a longer prognosis.

Megestrol acetate - starting dose 160mg orally daily for one month, then review.

Dose range: 160-800mg; no evidence for optimal dose.

Side effects: nausea, fluid retention, increased risk of thromboembolism.

Reduce dose gradually if used for more than 3 weeks (adrenal suppression).

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# Anorexia

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  - ❖ Assess psychosocial aspects
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## Anorexia

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- ❖ Prokinetics can be used for early satiety, delayed gastric emptying, gastroparesis or nausea.
  - ❖ Consider a trial of metoclopramide 10mg or domperidone 10-20mg (less long term side-effects) given tds a day half an hour before meals.
  - ❖ Low doses of dronabinol has shown to simulate appetite, an effect that may be related to the mood-altering effects of this group of drugs
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# Anorexia

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- ❖ Address concerns about the importance to the patient and caregiver of giving nourishment, refusing food, and eating as a social activity.
  - ❖ Explain that a gradual reduction in oral intake is natural as part of the illness.
  - ❖ Offer information and practical advice about nutrition in advanced illness, diet and management of anorexia.
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## Anorexia

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- ❖ Gently encourage the patient to take what he or she can manage.
  - ❖ Offer soft, easy to swallow foods; soup, pudding, nutritious drinks/ snacks.
  - ❖ Small portions, attractively presented, offered more often through the day.
  - ❖ Try not to talk about food all the time but keep the person involved in the social aspects of meals.
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# Dysphagia

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- ❖ Dysphagia either refers to the difficulty someone may have with initiating a swallow or it refers to the sensation that foods and or liquids are somehow hindered in their passage from the mouth to the stomach
  - ❖ The prevalence of dysphagia in palliative care ranges from 9 to 55% depending on the population group studied. Patients with head and neck cancers, for example, have a higher prevalence
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# Dysphagia

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<b>Causes of dysphagia</b>	
Oral	Xerostomia; Mucosal infection; Mucositis; Surgery; Dentition; Post-radiation fibrosis; Dystonic reactions; Pharyngeal pathology; Oesophageal pathology; Intraluminal obstruction; External compression; Drugs altering oesophageal tone; Anxiety
Neurological	Upper motor neurone damage; Lower motor neurone damage; Direct nerve damage; Cerebellar damage; ;Paraneoplastic; Neuromuscular
Other	Concurrent diseases; Drowsiness; Pain; Extreme weakness; Depression; Hypercalcaemia

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# Assessment

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- ❖ Location
  - ❖ Types of foods and or liquids
  - ❖ Progressive or intermittent
  - ❖ Duration of symptoms
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# Dysphagia

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- ❖ CXR
  - ❖ Barium swallow
  - ❖ Upper gastrointestinal endoscopy
  - ❖ CT scan
  - ❖ Endoscopic ultrasound
  - ❖ Test swallow
  - ❖ SALT assessment
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# Dysphagia

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- Education and explanation to patient and carers
  - Comprehensive and regular mouth care
  - Dental assessment,
  - Frequent small meals
  - Soft diet
  - Add calories to food or add high calorie supplements
  - Thickened fluids to aid swallowing
  - Review medication and discontinue drugs that may exacerbate swallowing difficulties
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# Dysphagia

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<b>Pharmacological treatments for dysphagia</b>	
Oesophageal candidiasis	Fluconazole 50mg d
Viral oesophageal ulceration	Acyclovir 200-800mg 5 times d
Oesophageal mucositis	PCA Sucralfate 10ml 2-4 h Maalox 5-10ml qds
Peritumour oedema	Dexamethasone 16mg SC
Tumour bleeding	Tranexamic acid 1g qds
Sialorrhoea	Amitriptyline 10mg on Hyoscine hydrobromide TD patch Glycopyrrolate/ Hyoscine hydrobromide CSC! Salivary gland irradiation

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# Dysphagia

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- ❖ Endoscopic dilatation of oesophageal obstruction
  - ❖ Oesophageal intubation
  - ❖ Endoscopic laser therapy
  - ❖ External beam radiotherapy
  - ❖ Brachytherapy
  - ❖ Chemotherapy
  - ❖ PEG feeding
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# Constipation

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- ❖ Constipation can be defined as the passage of small hard faeces infrequently and with difficulty.
  - ❖ About 50% of patients admitted to specialist palliative care units report constipation
  - ❖ 80% of patients will require laxatives.
  - ❖ Constipation is the most frequent and most persistent adverse effect of opioid treatment.
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# Constipation

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Causes of constipation		
Organic	Functional	Medication
Diverticululitis	Prolonged colon passage	Opioids
Tumours	Impaired defaecation	Antibiotics
Inflammation in the anal area	Insufficient fluid intake	Anticholinergics
Neurological disorders	Low fibre diet	Antihypertensives
Endocrine disorders	Immobility	Anticonvulsants
Metabolic causes		Antidepressants
Recto-anal disorders		Anti-parkinsonians
Megacolon		Diuretics
		Neuroleptics
		Antacids

## Management

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- ❖ Anticipate the problem – co-prescribe laxatives when prescribing opioids
  - ❖ Enquire about bowel function regularly
  - ❖ Use oral laxatives in preference to rectal measures
  - ❖ Use a combination of stimulant and softener laxatives
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## General measures

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- ❖ Encourage a good oral fluid intake
  - ❖ High fibre diet
  - ❖ Increase physical activity
  - ❖ Ensure patient has privacy and access to toilet facilities.
  - ❖ Address any reversible factors causing constipation.
  - ❖ If current regimen satisfactory and well tolerated, continue it but review patient regularly and explain importance of preventing constipation.
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# Constipation

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- ❖ Stimulant laxatives
  - ❖ Softening laxative
  - ❖ Combination preparations
  - ❖ Opioid antagonists
  - ❖ Rectal measures
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## Faecal impaction

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- ❖ Bisacodyl supps
  - ❖ Arachis oil retention enema to soften
  - ❖ Phosphate enema
  - ❖ Manual removal (with benzodiazepine cover)
  - ❖ Once successful, start regular oral measures to prevent recurrence
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# Diarrhoea

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- ❖ The passage of frequent loose stools with urgency
  - ❖ In advanced cancer patients, the prevalence of diarrhoea is approximately 4%.
  - ❖ In a hospice setting, 7-10% patients have been reported to have this complication.
  - ❖ Diarrhoea is an embarrassing and debilitating problem
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## Causes

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- ❖ Overuse of laxatives
  - ❖ Infection agents
  - ❖ Antibiotics
  - ❖ Chemotherapy
  - ❖ Radiotherapy
  - ❖ Surgery
  - ❖ Malnutrition
  - ❖ Paraneoplastic disorders
  - ❖ Neuroendocrine tumours
  - ❖ Neoplastic bowel infiltration.
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# Management

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- ❖ Ensure adequate hydration
  - ❖ Manage reversible causes
  - ❖ Loperamide
  - ❖ Hyoscine butylbromide
  - ❖ Kaolin Oral Suspension
  - ❖ Octreotide
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# Symptom Control

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