Diarrhoea

Introduction
Diarrhoea is the passage of frequent loose stools with urgency. It can be defined as the passage of more than three unformed stools within a 24 hour period.

Patients may describe diarrhoea as a single loose stool, frequent stools of normal or even hard consistency, or faecal incontinence, so careful clarification of the term is always required.

Diarrhoea can be a distressing and exhausting symptom for both the patient and their carers. It is important to remember that it can be an embarrassing symptom and impact on dignity, mood and relationships.

Possible causes
- Drugs including laxatives, antacids, antibiotics, non-steroidal anti-inflammatory drugs (NSAIDs), chemotherapy agents, disaccharide-containing (sugar-free) elixirs, iron.
- Radiotherapy, particularly when involving the abdomen or pelvis.
- Faecal impaction resulting in diarrhoea as overflow.
- Obstruction: malignant faecal impaction, narcotic bowel syndrome (severe constipation caused by opioid analgesia).
- Malabsorption.
- Pancreatic carcinoma, pancreatic islet cell tumours, carcinoid tumours.
- Concurrent disease, for example diabetes mellitus, hyperthyroidism, pancreatic insufficiency, inflammatory bowel disease such as Crohn's disease, ulcerative colitis, gastrointestinal infection.
- Diet, for example bran, fruit, hot spices, alcohol.

Assessment
Take a careful history detailing:
- frequency of defecation
- nature of stools including consistency, colour, presence of mucous or blood
- timing of the problem
- current and recent medications such as laxatives, broad spectrum antibiotics
- recent foreign travel.

Examination and investigations
- Exclude faecal impaction and intestinal obstruction: rectal examination, abdominal palpation. Abdominal x-ray may be required to confirm.

Persistent watery diarrhoea with systemic upset which might indicate an infective cause may require investigation.
Management

General measures
- Rehydrate as necessary preferably by the oral route.
- Drink clear fluids and eat simple carbohydrates such as toast or crackers.
- It may be difficult to digest lactose-rich foods such as milk. Avoid drinking milk in cases of infective diarrhoea. Even if not normally lactose intolerant, diarrhoea caused by a virus can cause sensitivity to milk products for a time after the diarrhoea has cleared.
- Gradually reintroduce proteins and then fats to the diet as diarrhoea resolves.

Specific measures

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<th>Treat or exclude specific causes, for example:</th>
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<tr>
<td>Drug induced</td>
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<td>Laxatives</td>
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<td>Proton pump inhibitors (PPIs) and antacids</td>
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<td>Chemotherapy agents</td>
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<td>Radiotherapy (RT) induced</td>
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<td>Sub-acute bowel obstruction</td>
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<td>Surgical resection (stomach, ileal, colon), bile salt diarrhoea</td>
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<td>Carcinoid syndrome</td>
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<td>Concurrent disease such as diabetes thyroid dysfunction</td>
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Medication

Suggested pharmacological management

- Loperamide 2mg after each loose stool. Maximum dose is 16mg a day.
- If not controlling diarrhoea rapidly change to 2mg four times a day.
- This can be increased to 4mg four times a day if required.
- Substitute codeine 30mg four times a day orally if ineffective.
- Thereafter consider a combination of loperamide and codeine and seek specialist advice.

Suggested pharmacological management for patients taking opioid analgesia

- Exclude opioid induced overflow diarrhoea.
- Consider converting morphine from slow-release tablets to normal-release preparation to improve absorption, or use continuous subcutaneous infusion (CSCI).
- If diarrhoea persists add loperamide 2mg after each loose stool.
- If not controlling diarrhoea rapidly change to 2mg four times a day.
- Can be increased to 4mg four times a day if required.
- If ineffective seek specialist advice.

Further considerations

- If severe diarrhoea is preventing absorption of oral drugs a CSCI may be required. Suggest seeking specialist advice.
- Persistent diarrhoea can cause depletion in vitamins, minerals and trace elements that are important for normal body functions and may require replacing, for example sodium, potassium, magnesium, zinc.
- Glucose is pro-absorptive in the bowel; giving a glucose or electrolyte drink, such as Dioralyte® or Lucozade Sport®, may help diarrhoea, as well as replacing important losses.
- Bacterial overgrowth or imbalance of the normal gut flora may cause diarrhoea despite negative stool cultures for pathogens, especially after ileo-colic resection or surgical formation of blind loops of gut. It may be worth considering discussing a course of metronidazole with GI specialists.
- Methylcellulose tablets can be tried (seek specialist advice).
- Octreotide may reduce high output diarrhoea following ileostomy or colectomy, and has been used in carcinoid syndrome, graft versus host disease and other cancer and AIDS-related diarrhoeas. It can be given by CSCI, suggest seeking specialist advice.
- Candida infection has been described causing secretory-type diarrhoea and can be treated with oral nystatin.
- Referral to local NHS continence service (for example anal plugs, incontinence pads).

Patients with HIV or AIDS
Patients with HIV or AIDS frequently have problems with diarrhoea, it is usually infective, but the diagnosis, isolation of pathogens, and treatment can be very complex. Specialist advice should be sought.

**Practice Points**

**Patient and carer advice points**

- Careful explanation required on constipation with overflow as it may be difficult to understand why diarrhoea is being treated with laxatives.
- Offer skin care advice for anal area such as:
  - wipe with moist toilet paper or cotton wool
  - avoid using baby wipes because they often contain alcohol
  - wash area after an episode of diarrhoea, use a shower attachment or a soft, disposable cloth and non-scented soap before patting the area dry
  - apply a thin layer of durable barrier film or cream
  - wear cotton underwear and avoid tight-fitting clothing.

**References**


