

OTC therapy in Gastrointestinal disease

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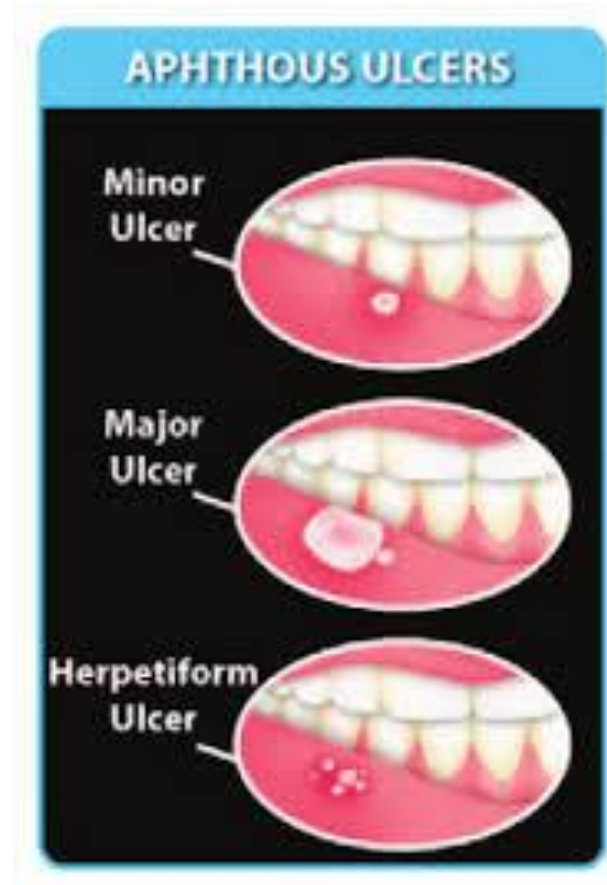
Mouth ulcers



آقای میانسال به داروخانه مراجعه و از وجود یک برآمدگی دردناک در دهان شکایت دارد. از دیشب متوجه آن شده و درد جوری بوده که شام دیشب و صبحانه امروز را خوب نخورده است. از وی میخواهید دهان را باز کند تا شما با چراغ تلغن همراه خود آن را مشاهده نمایید. در بررسی متوجه ضایعه منفرد سفید برجسته در قسمت جلوی دهان میشوید. ارتباط بروز این ضایعه با آسیب به دهان و دندان در این چندروز در ایشان منفی است.

main clinical presentations of mouth ulcers:

- ▶ Minor
 - ▶ major
 - ▶ Herpetiform
-
- ▶ Incidence: Minor > major > herpetiform



Clinical features of minor aphthous ulcers

- ▶ Minor aphthous ulcers(MAUs) are roundish, grey-white in color, and painful. They are small, usually less than 1 cm in diameter, and shallow, with a raised red rim.
- ▶ pain subsides after 3 or 4 days. They rarely occur on the gingival mucosa and occur singly or in small crops of up to five ulcers.
- ▶ It normally takes 7 to 14 days for the ulcers to heal, but recurrence typically occurs after an interval of 1 to 4 months

Major

- ▶ Deeper than minor and diameter > 1 cm
- ▶ Slow improvement (3-4 weeks)



Herpetiform

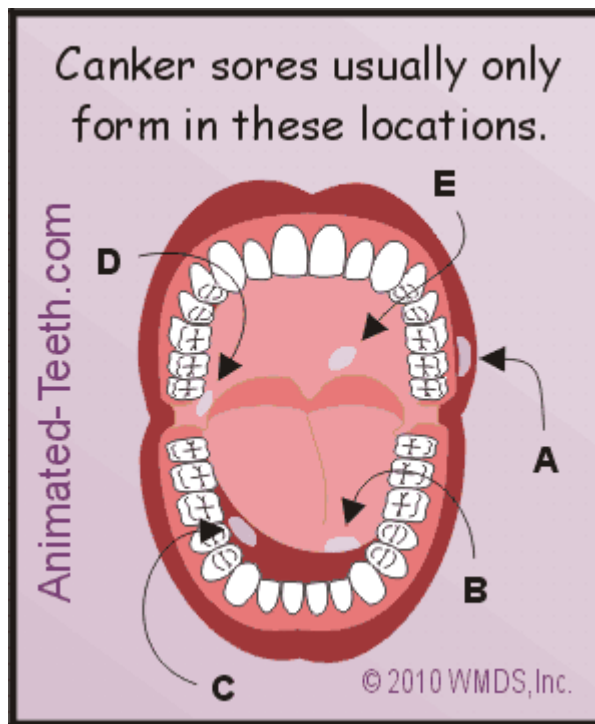
- ▶ Diameter:1-2 mm
- ▶ Usually in behind the mouth like pinpoint and multiple
- ▶ Mean improvement duration:2 weeks

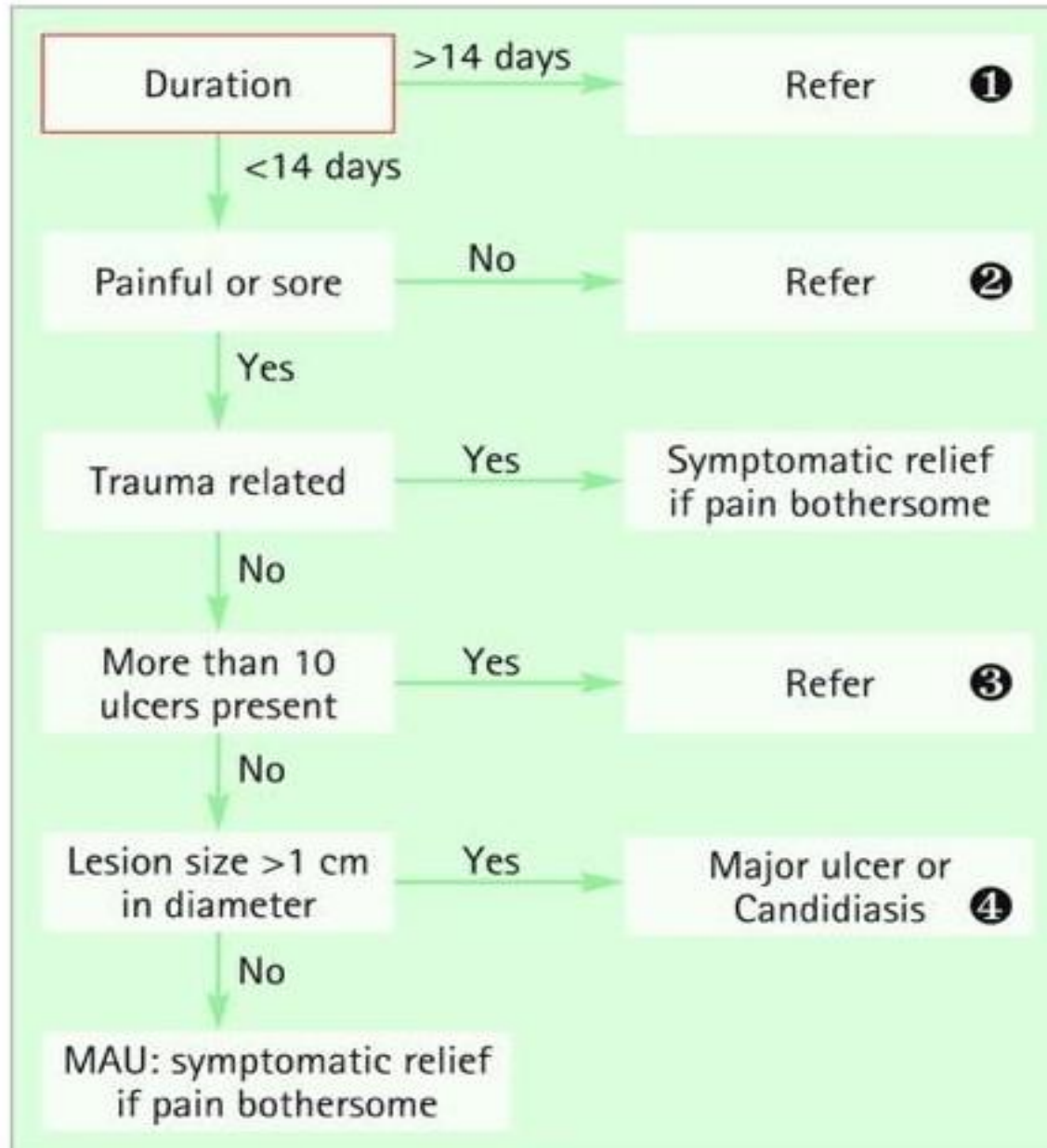


Question Relevance

- ▶ Number of ulcers: Minor aphthous ulcers (MAUs) occur singly or in small crops.
- ▶ Location of ulcers: Ulcers on the side of the cheeks, tongue are likely to be MAUs.
- ▶ Size and shape: Irregular-shaped ulcers tend to be caused by trauma. If ulcers are large or very small, they are unlikely to be caused by MAUs.
- ▶ Painless ulcers: Any patient presenting with a painless ulcer in the oral cavity must be referred. This can indicate sinister pathology such as leukoplakia or carcinoma.
- ▶ Age: MAUs in young children (< 10 years) are not common

Canker sores usually only form in these locations.





Treatment of MAUs

- ▶ Corticosteroids
- ▶ Anesthetics
- ▶ Chlorhexidine/benzydamine
- ▶ Herbal medicines
- ▶ Cocktails



درمان قطعی و سریع آفت دهان

AAFTIN GEL

QUICK RELIEF OF APHTHOUS ULCER

آفتین ژل

آفتین ژل



درمان قطعی و سریع آفت دهان

AAFTIN GEL

QUICK RELIEF OF APHTHOUS ULCER

آفتین ژل



COCKTAILS

- ▶ Diphenhydramine 60cc
 - ▶ Xylogel 1 tube
-
- ▶ Diphenhydramine 60cc
 - ▶ Almgs 30cc
 - ▶ Dexamethasone 1 vial

Oral Thrush



- ▶ Clinical features of oral thrush: The classic presentation of oral thrush is with creamy white, soft, elevated patches.
- ▶ Lesions can occur anywhere in the oral cavity but usually affect the tongue, palate, lips and cheeks. Patients sometimes complain of malaise and loss of appetite. In neonates, spontaneous resolution can occur but can take a few weeks



Oral thrush

- ▶ oral thrush is an opportunistic mucosal infection that is unusual in healthy adults.
- ▶ The very young (neonates) and the very old are most likely to suffer from oral thrush
- ▶ It is associated with underlying pathology such as diabetes, xerostomia (dry mouth) and patients who are immunocompromised, or an attributable risk factor such as recent antibiotic therapy, inhaled corticosteroids.

Question Relevance

- ▶ Size and shape of lesion: Typically patients with oral thrush present with patches. They tend to be irregularly shaped and vary in size from small to large.
- ▶ Associated pain: Thrush almost always causes some degree of discomfort. Painless patches, especially in people >50 years, should be referred to exclude sinister pathology, such as leukoplakia.

TRIGGER POINTS INDICATIVE OF REFERRAL

- ▶ Diabetic patients: May indicate poor diabetic control
- ▶ Duration > 3 weeks
- ▶ Immunocompromised patients
- ▶ Painless lesions

Treatment

- ▶ Nystatin (400,000-600,000 units q6h)
- ▶ Fluconazole(200 mg LD,then 100 to 200 mg daily)
- ▶ Miconazole oral gel





Diarrhea



آقای حدود پنجاه ساله به داروخانه مراجعه و برای رفع اسهال از شما دارو می خواهد. در شرح حال مشخص می گردد که از دیروز اسهال آغاز شده و روزی چهار تا پنج بار مجبور است به دستشویی برود. اسهال آبکی ولی غیر خونی می باشد. علائم دیگر مانند تب و تهوع ندارد و فقط کمی بی حال است. خودش بیان می کند که دیروز در یک رستوران نهار خورده است. در طی یک هفته اخیر دارویی مصرف نکرده است و اصولاً به جز بیخوابی مشکل دیگری ندارد و جهت رفع بیخوابی بصورت موردی لورازپام میخورد.

Diarrhea

- ▶ increase in frequency of the passage of soft or watery stools relative to the usual bowel habit for that individual.
- ▶ passage of three or more loose or liquid stools per day
- ▶ The most common cause of diarrhea in all age groups, is usually viral in origin. Bacterial causes of diarrhea are normally a result of eating contaminated food or drink, which cause diarrhea by a number of mechanisms.
- ▶ Nausea and vomiting might be present before or during the acute diarrhea. Abdominal cramping, flatulence and tenderness are also often present.

QUESTION

Nature of the stools??

Diarrhea associated with blood and mucus (dysentery) requires referral to eliminate invasive infection such as Shigella, Campylobacter jejuni, Salmonella, Clostridium difficile and Escherichia coli. Bloody stools are also associated with conditions such as inflammatory bowel disease.

Duration??

A person who presents with a history of chronic diarrhea should be referred. The most frequent causes of chronic diarrhea are irritable bowel syndrome (IBS), inflammatory bowel disease, and colon cancer.

Onset of symptom??

Ingestion of bacterial pathogens can give rise to symptoms in a matter of a few hours (toxin-producing bacteria) after eating contaminated food or up to 3 days later.

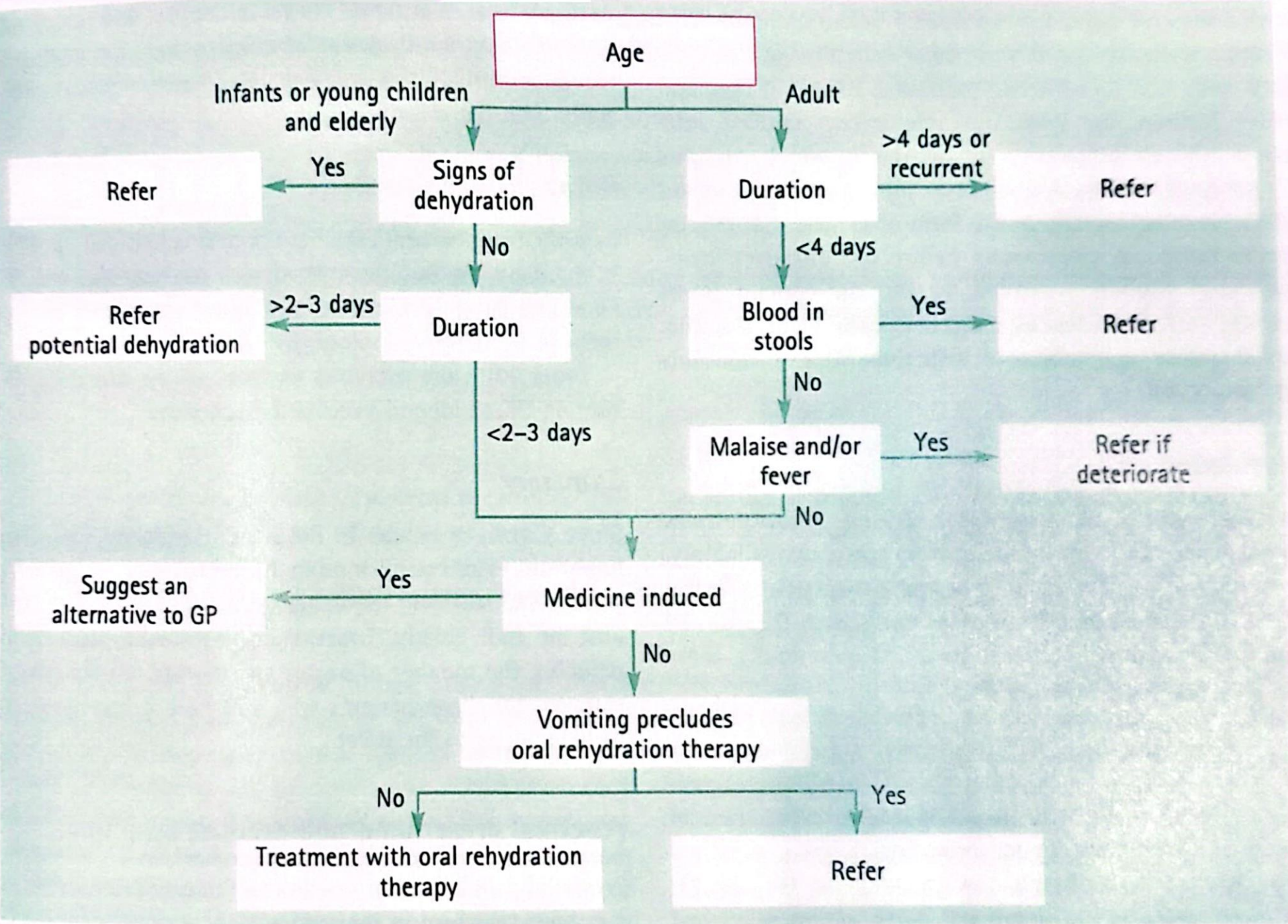
Timing of diarrhea??

Patients who experience diarrhea first thing in the morning might have underlying pathology such as IBS.

Recent change of diet???

If the person has recently been to a non-Western country, giardiasis is a possibility.

Signs of dehydration yes/no



Management

- ▶ The main aim: relief of dehydration
- ▶ The others: relief of diarrhea frequency and abdominal pain

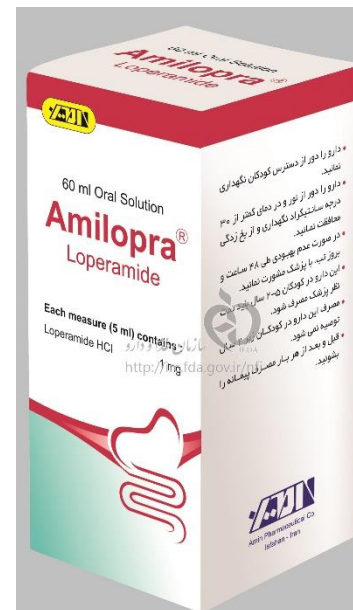
Oral rehydration solution (ORS)

- ▶ prevent and treat dehydration
- ▶ can be given to all patient group
- ▶ In adults, 2 L of ORS should be given in the first 24 hours, followed by unrestricted normal fluids, with 200 mL of rehydration solution per loose stool



loperamide

- ▶ Mechanism
- ▶ Dosing: initial 4mg, followed by 2 mg after each loose stool (maximum:16 mg/day)
- ▶ Abdominal pain, xerostomia
- ▶ In high dose: CNS, respiratory suppression
- ▶ Cannot be used in children under 12

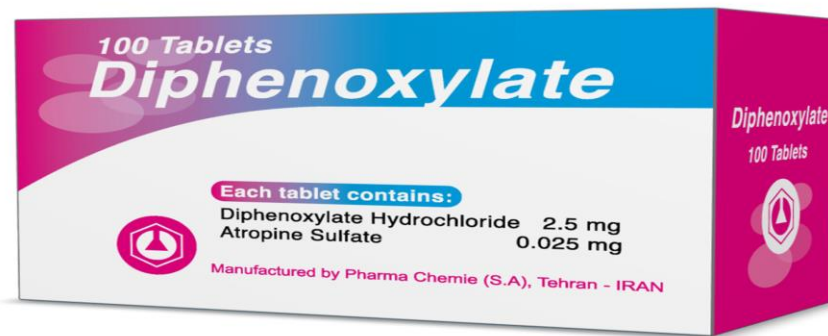


Bismuth subsalicylate

- ▶ Mechanism
- ▶ Slow onset of action compared with loperamide
- ▶ Dosing: 525 mg every 30 minutes to 1 hr as needed (max 8 tablet /day)
- ▶ ADRs: Black fecal
- ▶ Avoid in pregnancy and lactation, age under 16 yr
- ▶ Drug-drug interaction with flouroquinolones



Diphenoxylate+ Atropine tablet



Constipation

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the page, creating a modern, layered effect. The rest of the page is plain white.

Constipation

- ▶ Infrequent bowel movements less than three per week
- ▶ Lumpy or hard stools in more than 25 percent of defecations
- ▶ Sensation of incomplete evacuation for more than 25 percent of defecations



Etiology

10 Causes Of Constipation

- Not Eating Enough Fiber
- Not Drinking Enough Water
- Out Of Balance Gut Bacteria
- Certain Medications
- Too Much Supplemental Calcium or Iron
- Eating Too Much Dairy
- Eating Too Much Sugar & Unhealthy Fats
- Depression
- Lack of Physical Activity
- Laxative Abuse

GUT HEALTH
PROJECT

Etiology

- ▶ Neurogenic disorders (MS, Parkinson disease)
- ▶ Non-neurologic disorders (DM, Hypothyroidism)
- ▶ Irritable bowel syndrome
- ▶ pregnancy
- ▶ Drugs

Drugs associated with constipation

Analgesics
Anticholinergics
Antihistamines
Antispasmodics
Antidepressants
Antipsychotics
Cation-containing agents
Iron supplements
Aluminum (antacids, sucralfate)
Barium
Neurally active agents
Opiates
Antihypertensives
Ganglionic blockers
Vinca alkaloids
Calcium channel blockers
5HT3 antagonists

- ▶ Lifestyle changes For example, changes in job or marital status can precipitate depressive illness that can manifest with physiological symptoms, such as constipation.
- ▶ Relevance to change of diet or routine: Constipation usually has a social or behavioural cause. There will usually be some event that has precipitated the onset of symptoms.
- ▶ Pain on defecation: Associated pain when going to the toilet is usually due to a local anorectal problem.
- ▶ Presence of blood: Bright red specks in the toilet or smears on toilet tissue suggest haemorrhoids or fissure. However, if blood is mixed in the stool (melaena), referral is necessary. A stool that appears black and tarry is suggestive of an upper gastrointestinal bleed.
- ▶ Duration (chronic or recent?) in adults: >14 days with no identifiable cause should be referred.

Any Alarm Symptoms? Are Diagnostic Tests Needed?

- Hematochezia
- Family history of colon cancer
- Family history of inflammatory bowel disease
- Anemia
- Positive fecal occult blood test
- “Unexplained” weight loss ≥ 10 pounds
- Severe, persistent constipation that is unresponsive to treatment
- New-onset constipation in an elderly patient

Locke GR III, et al. *Gastroenterology*. 2000;119:1761-1778.
Brandt LJ, et al. *Am J Gastroenterol*. 2005;100(suppl 1):S5-S21.



OTC laxatives

The right side of the slide features a decorative graphic composed of several overlapping, semi-transparent green triangles and polygons. The colors range from a light, pale green to a vibrant, saturated lime green. The shapes are arranged in a way that creates a sense of depth and movement, with some shapes appearing to be layered behind others. The overall effect is a modern, abstract design element.

TREATMENT

- ▶ As initial management in the treatment of idiopathic constipation, we suggest dietary fiber and bulk-forming laxatives such as psyllium together with adequate fluids
- ▶ Safe in pregnancy and lactation



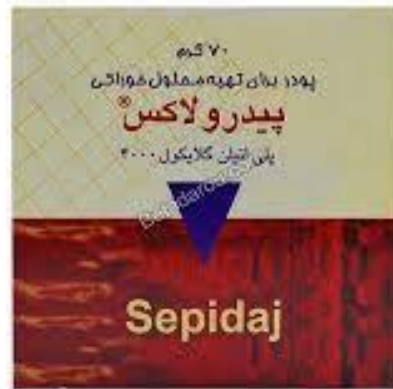
Pydrolax

- ▶ For patients who do not tolerate bulk-forming laxatives or respond poorly to fiber, we suggest an osmotic laxative next if tolerated.

Use:

constipation

Bowel preparation before colonoscopy



Lactulose syrup



- ▶ Synthetic disaccharides - Lactulose is a synthetic disaccharide. It is converted to 3 acids in intestinal lumen. Increase in osmotic pressure in the lumen
- ▶ Lactulose requires some time (24 to 48 hours) to achieve its effect.

Use: constipation

Hepatic encephalopathy

ADRs: Flactulance, Electrolyte imbalance

It can be diluted in fruit juice /tea/water

Magnesium hydroxide suspension

- ▶ Magnesium, when used as a laxative, is usually given as magnesium hydroxide. The adult dose ranges between 30 to 45 mL, when needed.
- ▶ It can be dosed single daily
- ▶ Rapid onset of action compared with lactulose
- ▶ Shake the bottle before use
- ▶ Interactions???





Bisacodyl

- ▶ Stimulant laxatives
- ▶ Tablets/suppositories
- ▶ EC coated of bisacodyl tablet
- ▶ patients older than 4 years.
- ▶ The dose for children is 5 mg (one paediatric suppository) and, for adults and children older than 10 years, the dose is 5 to 10 mg (one or two tablets or one 10-mg suppository)

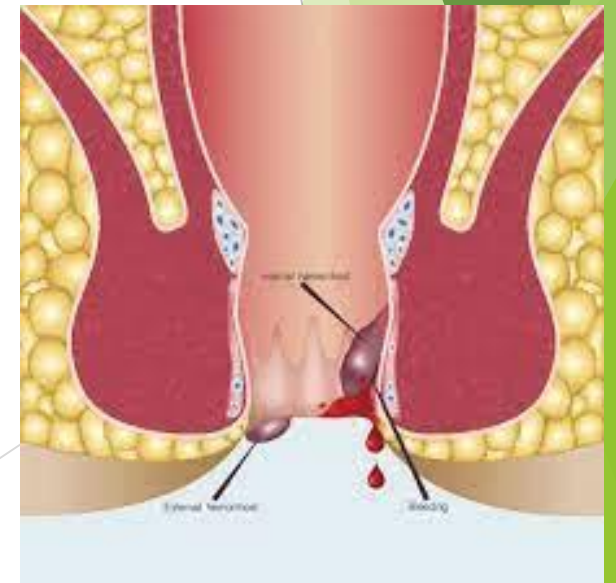


Hemorrhoid

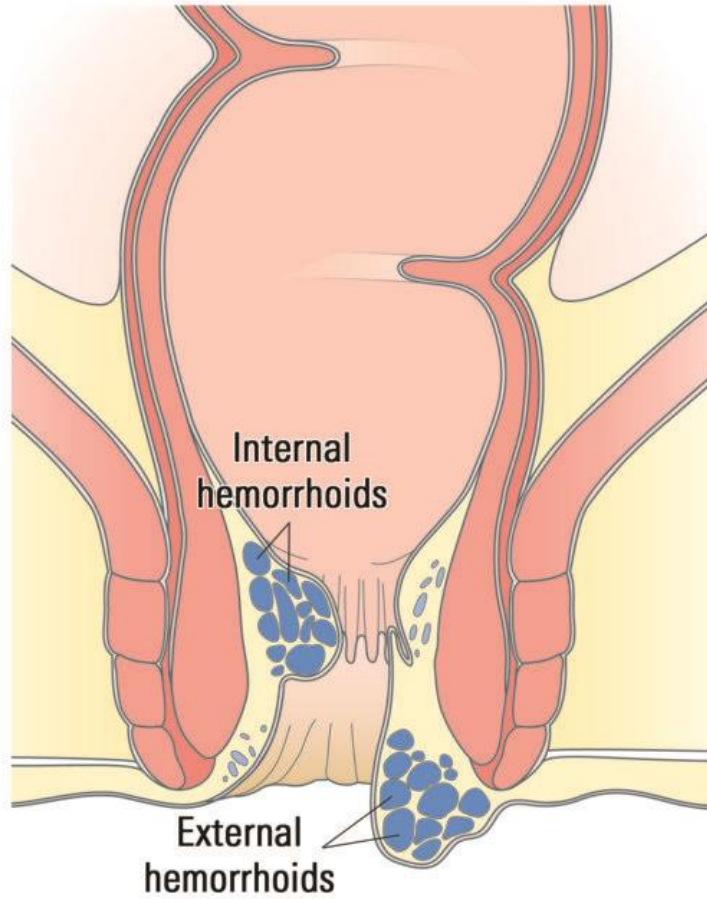
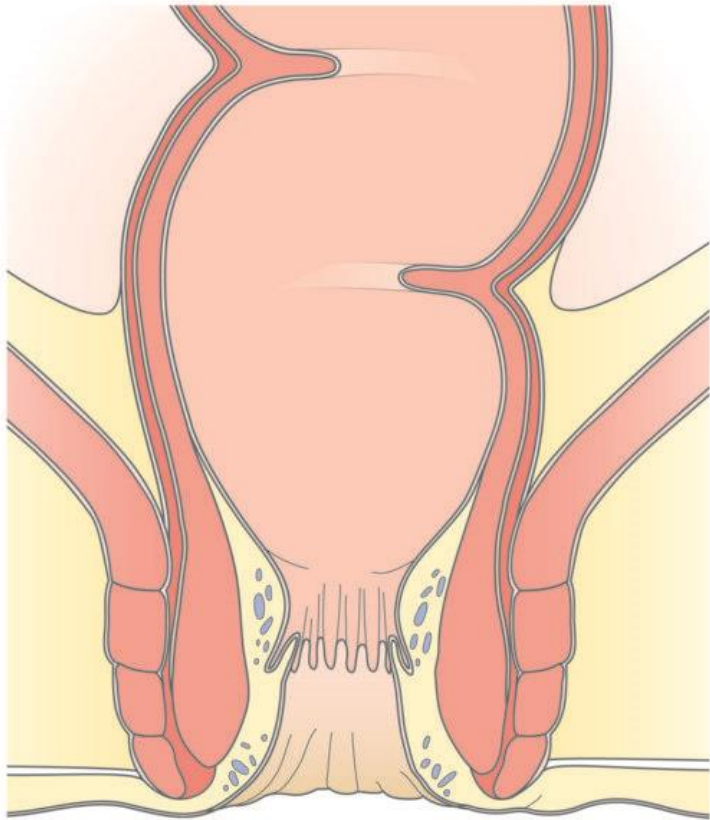


hemorrhoid

- ▶ The common disease of anal part
- ▶ Equal in both sex and more between 45-65
- ▶ Attention to the privacy for taking the history in the pharmacy
- ▶ Bright red painless rectal bleeding
- ▶ Blood is usually seen as spotting around the toilet
- ▶ Itching and irritation
- ▶ Internal , external hemorrhoid
- ▶ Internal hemorrhoids are rarely painful



Etiology



Hemorrhoids are very common, occurring in half of all men and women by age 50.



CAUSES of Hemorrhoids

ADVANCED Age



HEAVY Lifting



DIARRHEA



PREGNANCY & CHILD BIRTH



PROLONGED Sitting



CONSTIPATION & STRAINING

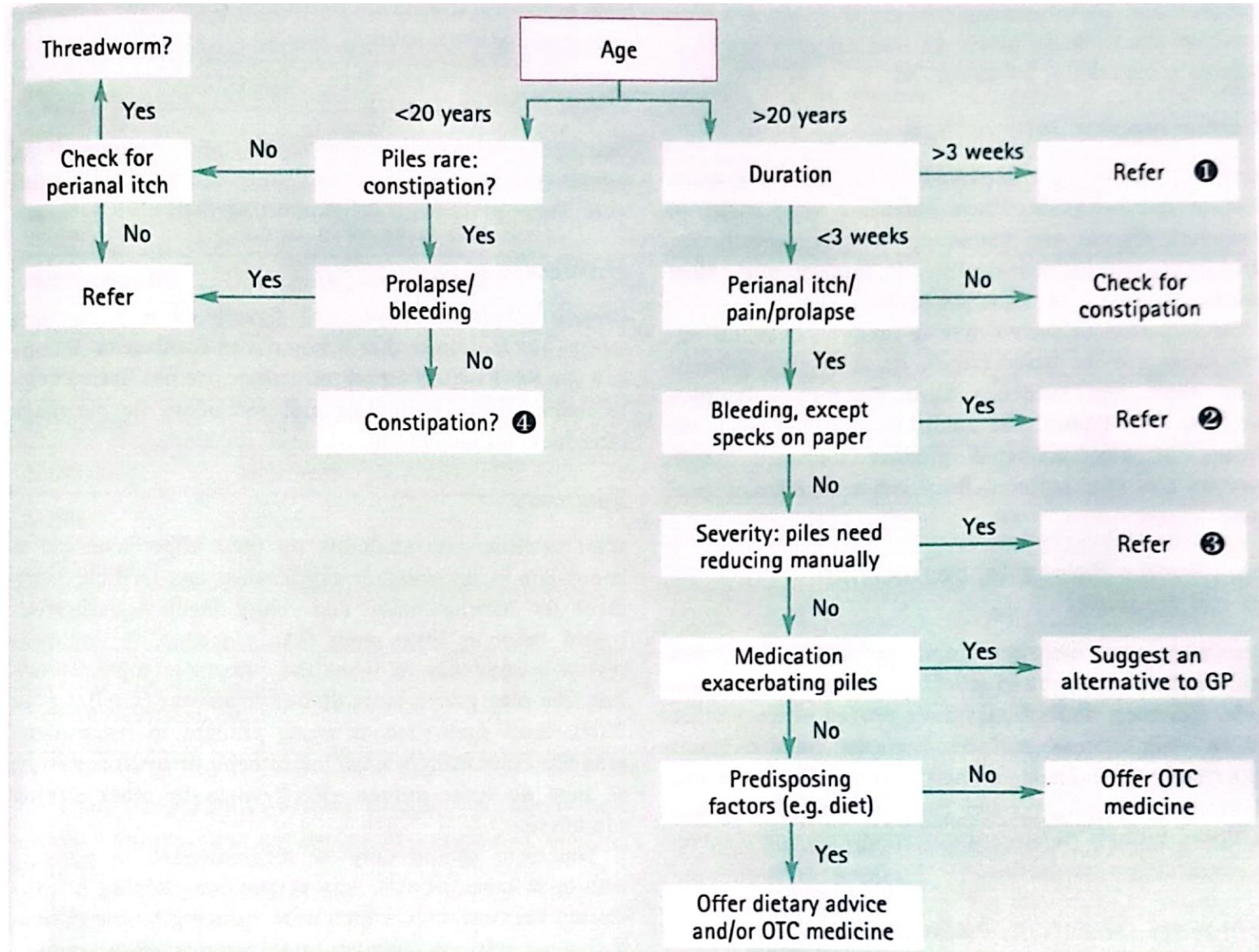


Question Relevance

- ▶ Duration: patients with symptoms that have been constantly present for > 3 weeks should be referred.
- ▶ Pain
- ▶ Rectal bleeding
- ▶ Associated symptoms
- ▶ Diet

TRIGGER POINTS INDICATIVE OF REFERRAL

- ▶ Persistent or marked change in bowel habit in patients >40 years
- ▶ Unexplained rectal bleeding
- ▶ Blood mixed in the stool
- ▶ Fever
- ▶ Severe pain associated with defecation



Management in the pharmacy

- ▶ Non pharmacologic
- ▶ Pharmacologic

Pharmacological intervention

- ▶ Anaesthetics
- ▶ Anti-inflammatory drugs





IBS (Irritable Bowel Syndrome)

The slide features a white background with a decorative graphic on the right side. This graphic consists of several overlapping, semi-transparent green triangles and polygons in various shades of green, creating a modern, abstract design.

▶ خانم جوانی با شکایت احساس نفخ و درد شکم تحتانی به داروخانه مراجعه و خواستار یک ضد درد است. تقریباً درد از زمان مرگ برادرشان شروع شده (حدود 1 ماه پیش). در این مدت احساس می کنند دفعات اجابت مزاج نیز کم شده. در آزمایشگاه تشخیص طبی کار می کنند و آزمایشی از خود انجام داده اند که تستهای کبد، کلیه، تیروئید و قند طبیعی و فقط کم خونی خفیفی دارند.

Irritable bowel syndrome (IBS)

- ▶ Abdominal pain and bloating are associated with a change in bowel habits.
- ▶ The diagnosis is suggested by the presence of long-standing colonic symptoms, without any deterioration in the patient's general health
- ▶ IBS is likely if the patient has had any of the following symptoms for 6 months: Abdominal pain or discomfort/Change in bowel habit

Question Relevance

- ▶ Age

IBS usually affects people <45 years. Prevalence of organic bowel disease is more common after the age of 45.

- ▶ Periodicity

IBS tends to be episodic. Often, patients can trace their symptoms back many years, even to childhood.

- ▶ Presence of abdominal pain

The nature of pain experienced by patients with IBS is very varied, ranging from localized and sharp to diffuse and aching. The patient will probably have experienced similar abdominal pain in the past. Any change in the nature and severity of the pain is best referred for further evaluation.

- ▶ Location of pain

Pain from IBS is normally located in the left lower quadrant

- ▶ Diarrhea and constipation

Constipation-predominant IBS is more common in women.

TRIGGER POINTS INDICATIVE OF REFERRAL

- ▶ Blood in the stool
- ▶ Fever
- ▶ Nausea and/or vomiting
- ▶ Severe abdominal pain
- ▶ Children < 16 years
- ▶ Patients > 45 years with recent changes to bowel habit
- ▶ Steatorrhoea

Recommendation

- ▶ Patient education & emotional support
- ▶ Dietary advice

Drink at least eight cups of fluid per day, especially non caffeinated drinks.

Reduce intake of alcohol and fizzy drinks.

Consider limiting intake of high-fiber food.

Limit fresh fruit

OTC Treatment

- ▶ Mebeverine
- ▶ Hyoscine
- ▶ peppermint oil
- ▶ bulk-forming and stimulant laxatives can be used to treat constipation-predominant IBS and loperamide for diarrhoea-predominant IBS.



THE END