Mouth ulcer+ oral thrush

By
Dr Mohamed AbdElrahman
Lecturer of clinical pharmacy

Mouth ulcers

- superficial painful oral lesions that occur in recurrent bouts at intervals between a few days to a few months.
- The majority of patients (80%) who present in a community pharmacy will have minor aphthous ulcers (MAU).
- the community pharmacists' role to exclude more serious pathology, for example, systemic causes and carcinoma.

Prevalence and epidemiology

- The prevalence and epidemiology of MAU is poorly understood.
- They occur in all ages but it has been reported that they are more common in patients aged between 20 and 40, and up to 66% of young adults give a history consistent with MAU.

Aetiology

- The cause of MAU is unknown.
- A number of theories have been put forward to explain why people get MAU, including:
- a genetic factor.
- stress
- Trauma
- food sensitivities
- Nutritional deficiencies (iron, zinc and vitamin B12)
- infection

Causes of ulcers

- Most likely :Minor aphthous ulcers (MAU)
- Likely :Major aphthous ulcers, Trauma
- Unlikely : Herpetiform ulcers, herpes simplex, oral thrush medicine-induced.
- Very unlikely :Oral carcinoma - erythema multiforme (Steven's Johnson syndrome) - Behçet's syndrome – cronhs syndrome-ulcerative colitis.

Specific questions to ask the patient: Mouth ulcers

1- Number of ulcers

- MAU occur singly or in small crops.
- Patients with numerous ulcers are more likely to be suffering from major or herpetiform ulcers rather than MAU

2. Location of ulcers

- Ulcers on the side of the cheeks, tongue and inside of the lips are likely to be MAU.

- Ulcers located toward the back of the mouth are more consistent with major or herpetiform ulcers.

3. Size and shape of ulcer

- Irregular-shaped ulcers tend to be caused by trauma. If trauma is not the cause then referral is necessary to exclude sinister pathology
- If ulcers are large or very small they are unlikely to be caused by MAU.

4. Painless ulcers

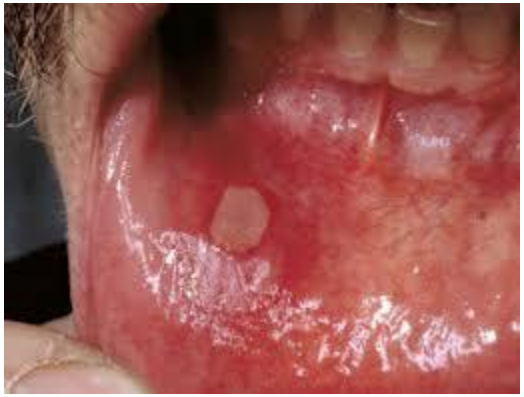
- Any patient presenting with a painless ulcer in the oral cavity must be referred.
- This can indicate sinister pathology such as leukoplakia or carcinoma.

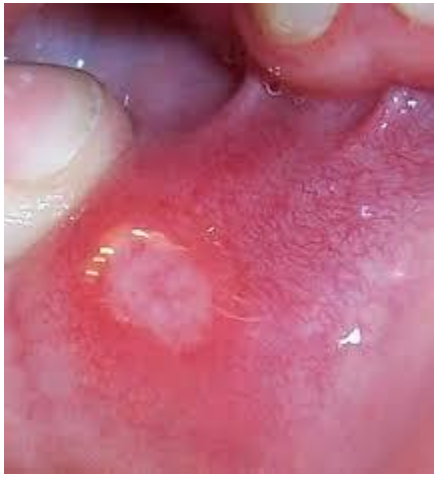
5. Age

- MAU in young children (<10 years old) is not common and other causes such as primary infection with herpes simplex should be considered.
- If ulcers appear for the first time after adolescence then the diagnostic probability is increased for them to be caused by things other than MAU

Most likely :Minor aphthous ulcers (MAU)

- The ulcers of MAU are roundish, grey-white in colour and painful.
- They are small – usually less than 1 cm in diameter and shallow with a raised red rim.

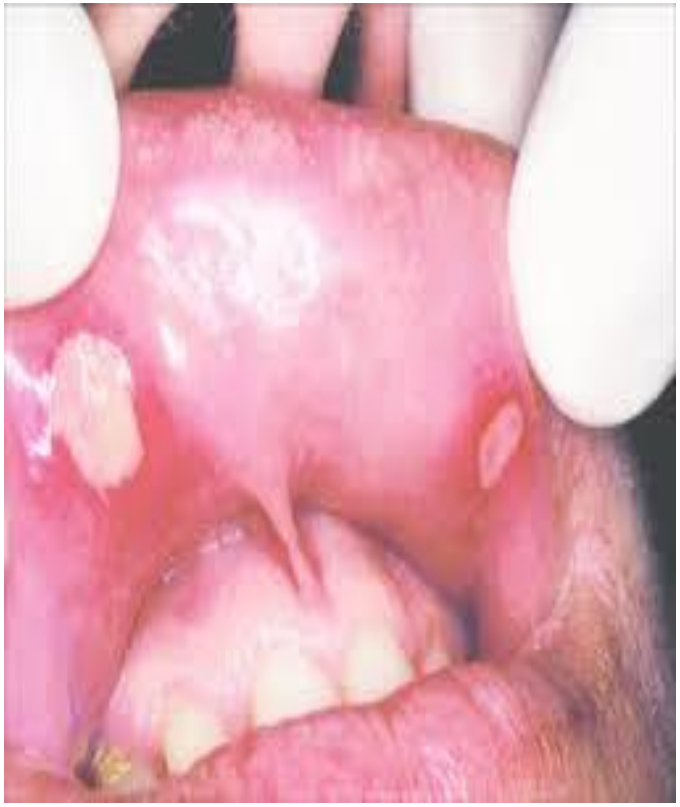




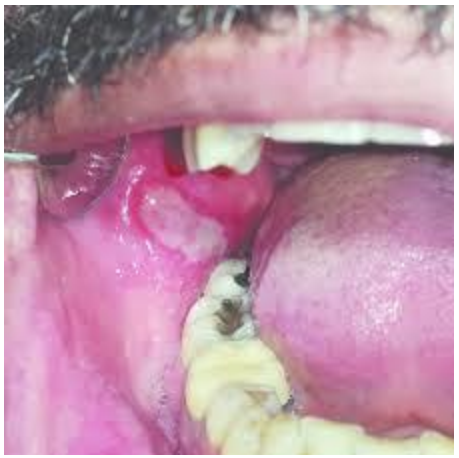
- Pain is the key presenting symptom and can make eating and drinking difficult, although pain subsides after three or four days.
- They rarely occur on the gingival mucosa .
- occur singly or in small crops of up to five ulcers.
- It normally takes 7 to 14 days for the ulcers to heal.
- recurrence typically occurs after an interval of 1 to 4 months.

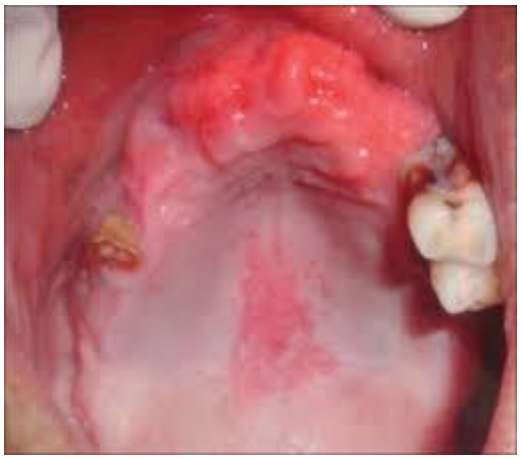
Likely causes(Major aphthous ulcers -Trauma)

- Major aphthous ulcers
- These are characterised by large (greater than 1 cm in diameter), numerous ulcers, occurring in crops of 10 or more.
- The ulcers often coalesce to form one large ulcer.
- The ulcers heal slowly and can persist for many weeks



- Trauma
- Trauma to the oral mucosa will result in damage and ulceration.
- Trauma may be mechanical (e.g. tongue biting) or thermal resulting in ulcers with an irregular border.





Unlikely causes(Herpetiform ulcers-Oral thrush-Herpes simplex-Medicine induced ulcers)

- 1- Herpetiform ulcers

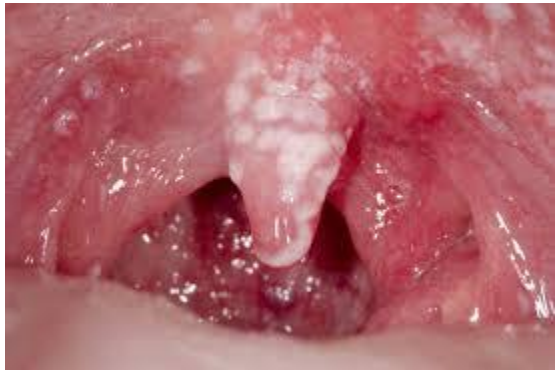
-Herpetiform ulcers are pinpoint and occur in large crops of up to 100 at a time.

- They usually heal within a month and often occur in the posterior part of the mouth, an unusual location for MAU.

- Both herpetiform and major aphthous ulcers are approximately ten times less common than MAU.

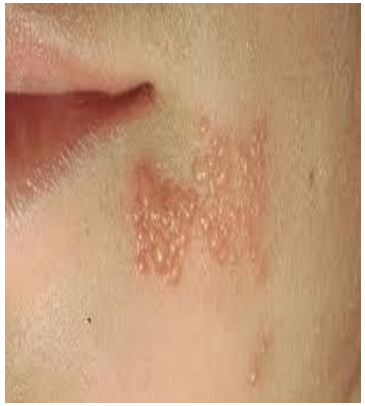
Oral thrush

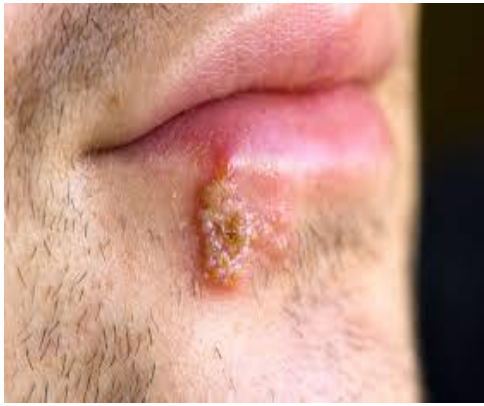
- Oral thrush usually presents as creamy-white soft elevated patches.

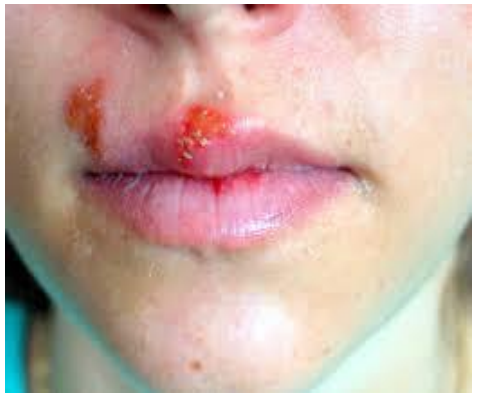


Herpes simplex

- Herpes simplex virus is a common cause of oral ulceration in children.
- ulceration of any part of the oral mucosa, especially the gums, tongue and cheeks.
- The ulcers tend to be small and discrete and many in number.
- Prior to the eruption of ulcers the person might show signs of systemic infection such as fever and pharyngitis.







Medicine-induced ulcers

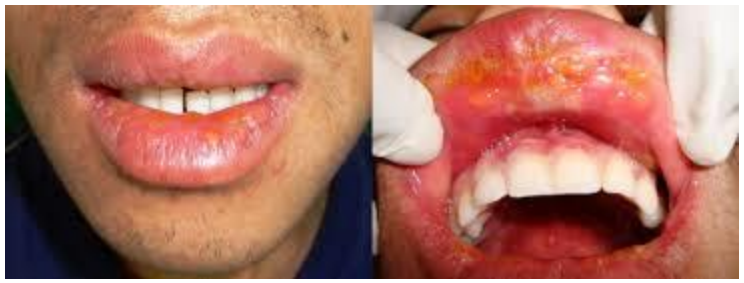
- These include cytotoxic agents, nicorandil, alendronate, non-steroidal anti-inflammatory drugs (NSAIDs) and beta-blockers.
- Ulcers are often seen at the start of therapy or when the dose is increased.

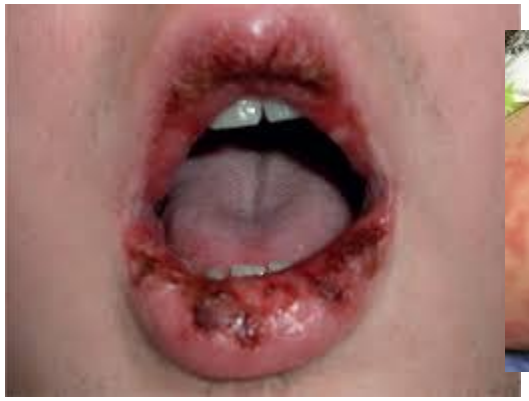
Very unlikely causes Carcinoma-Erythema multiforme-Behcet's syndrome

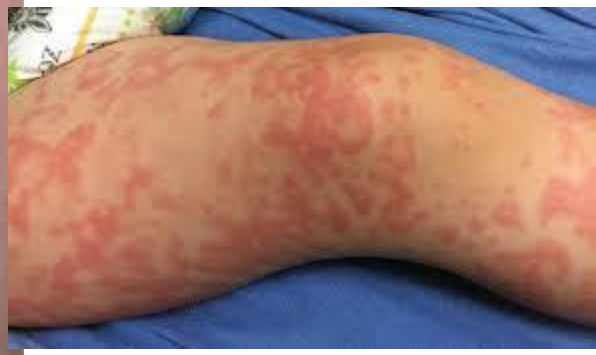
- Carcinoma
- The majority of cancers are noted on the side of the tongue, mouth and lower lip.
- Initial presentation ranges from painless spots, lumps or ulcers in the mouth or lip area that fail to resolve.
- The majority of cancers are noted on the side of the tongue, mouth and lower lip. Initial presentation ranges from painless spots, lumps or ulcers in the mouth or lip area that fail to resolve.
- The painless nature of early symptoms leads people to seek help only when other symptoms become apparent.

Erythema multiforme

- Erythema multiforme is diveded into major and minor form and now regarded as distinct from steven –johnson syndrome (SJS) and toxic epidermal necrolysis (TEN)



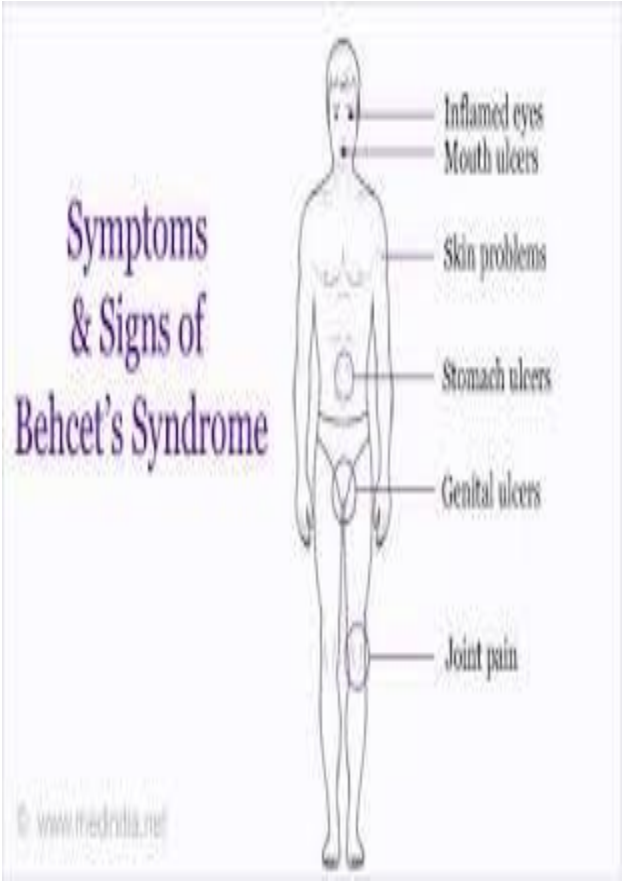




- Infection or drug therapy can cause erythema multiforme, although in about 50% of cases no cause can be found.
- Symptoms are sudden in onset causing widespread ulceration of the oral cavity.
- In addition the patient can have annular and symmetric erythematous skin lesions located toward the extremities.
- Conjunctivitis and eye pain is also common.

Behcet's syndrome

- Most patients will suffer from recurrent, painful major aphthous ulcers that are slow to heal.
- Lesions are also observed in the genital region and eye involvement (iridocyclitis) is common



Treatment

- A wide range of products are used for the temporary relief and treatment of mouth ulcers.
- These products contain
- Corticosteroids
- local anaesthetics
- Antibacterials
- Astringents and antiseptics

corticosteroids

- Topical corticosteroids are recommended as one of the main line treatment for patients with MAU.
- There are another treatment (hydrocortisone muco-adhesive buccal tablets) each tablet contains2.5 mg hydrocortisone in the form of hydrocortisone sodium succinate .

- The dose for adults and children over 12 is one pellet to be dissolved in close proximity to the ulcers four times a day for up to 5 days.

- It does not interact with any medicines ,can be taken by all patients groups, has no side effects ,and appears to be safe in pregnancy and breast-feedings.

Antibacterial agents (e.g. chlorhexidine)

- Chlorhexidine mouthwash is indicated as an aid in the treatment and prevention of gingivitis and in the maintenance of oral hygiene, which includes the management of aphthous ulceration
- they reduced the pain and severity of each episode of ulceration.
- Ten milliliters of the mouthwash should be rinsed around the mouth for about one minutes twice aday.

- It can be used by all patients groups, including who are breastfeeding's and pregnant.
- Side effects associated with it include reversible tongue and tooth discoloration , burning of the tongue and taste disturbances.

An aesthetic or analgesics

- There is very little trial data to support the pain-relieving effect of an aesthetics or analgesics in MAU, apart from choline salicylate andbenzydamine.
- these preparations are clinically effective in other painful oral conditions.
- It is therefore not unreasonable to expect some relief of symptoms to be shown when using these products to treat MAU.

- All local anaesthetics have a short duration of action ,frequent dosing is therefore required to maintain the anaesthetics effect.
- E.g lidocaine and benzocaine.

- Choline salicylate has been shown to exert an analgesic effect .
- choline salicylate was found to be significantly superior to placebo in relieving pain of oral aphthous ulceration..
- Adults and children over 16 years old should apply the gel, using a clean finger, over the ulcer when needed, but limit this to every 3 hours.
- It is a safe medicine and can be given to all patient group.

- Benzydamine mouth washes was not significantly different from placebo in termsof ulcer severity or ulcer pain.
- However 50 % of patients preferred benzydamine because of its transient topical analgesic effect.

Protectants

- Orabase is a paste of gelatin, pectin and carmellose sodium, which sticks when it comes in contact with wet mucosal.