

The British & Irish Society for Oral Medicine

Clinical Care | Research | Education

Erythema Multiforme (EM)

What are the aims of this leaflet?

This leaflet has been written to help you understand more about erythema multiforme (EM). It tells you what it is, what may cause it, what can be done about it and where you can find out more about it.

What is erythema multiforme?

Erythema multiforme is an acute condition which can affect the mouth, causing painful and widespread ulceration. The lips are often involved with ulceration and crusting. The skin on any part of the body can also be affected in the form of a rash. The condition can get better by itself, but treatment can help it heal more quickly and reduce symptoms.

In the severe form of the disease (erythema multiforme major/ bullous erythema multiforme) the skin, eyes, oesophagus (gullet), airways, as well as the mouth can be affected, and the condition can be life threatening without treatment. Erythema multiforme commonly occurs between the ages of 10 and 40. It usually occurs once but may be a recurrent problem in up to 25% of patients.

What causes erythema multiforme?

The cause of erythema multiforme is not fully understood but is not infectious and cannot be caught by someone else. It is thought to be caused by a hypersensitivity reaction or your own immune system over-reacting to an unknown trigger. The trigger in some cases is infection e.g. the cold sore virus: herpes simplex. Antibiotics (e.g. sulphonamides and amoxicillin) and other medicines can also trigger the condition. In about half of the cases of erythema multiforme, the trigger is unknown.



Is erythema multiforme hereditary?

There is no evidence that erythema multiforme has a hereditary basis.

What are the symptoms of erythema multiforme?

This depends on how severe the condition is. Skin lesions can be itchy. Some patients notice mild "flu- like" symptoms prior to the development of skin or oral problems. Ulceration in the mouth and lip crusting can cause a range of problems, from severe discomfort to making eating and drinking uncomfortable and extremely difficult.

What does erythema multiforme look like?

- The mouth can have multiple ulcers affecting many areas, including the tongue and inside of the cheeks. The lips can bleed and become crusted.
- In more severe cases, ulceration can also affect the genitals, eyes, oesophagus and airways.
- The patches on the skin can be quite specific for erythema multiforme. These
 are called "target" lesions because they have the appearance of a target with
 "rings" of paler skin surrounding a darker centre. However some skin lesions
 are less characteristic.

How is erythema multiforme diagnosed?

There is no specific test for the condition and it is often diagnosed by your history and the clinical appearance of the mouth and lips, as well as the skin rash (if present). Sometimes it is necessary to take a small sample from the inside of your mouth (a biopsy) or arrange blood tests to help rule out any other causes of oral ulceration.



Can erythema multiforme be cured?

Most patients recover completely. If drugs such as antibiotics have triggered erythema multiforme, these should be avoided in future. If medications need to be changed, this should be organised by your doctor or specialist. Do not stop taking any long-term drugs, unless under medical supervision. There is a risk of further attacks if your erythema multiforme has been caused by the cold sore virus (herpes simplex).

How can erythema multiforme be treated?

Mild attacks affecting the mouth can be treated with various agents, which can help relieve discomfort, prevent secondary infection and help healing. These include:

- Antiseptics. Preferably alcohol-free mouthwash, spray or gel (e.g. chlorhexidine gluconate). This can help reduce the chances of secondary infection of the ulceration and control plaque levels on the teeth if tooth brushing is too uncomfortable.
- Anaesthetic (analgesic) mouthwash or spray. This can help by numbing the mouth before eating/ drinking or brushing teeth.
- Corticosteroids. These can be topical (on the surface of the mouth and spat out) in a mouthwash, spray or dissolvable pellet. In severe cases a systemic (swallowed) short course of tablet corticosteroids can be given.
 Corticosteroids aim to reduce inflammation.
- **Antibiotics.** If the trigger is thought to be a bacterial infection then you may be treated with an antibiotic.
- Changing or avoiding medication. If the trigger is thought to be a
 medication it may be advised that you stop taking this or be avoided in the
 future.



 Occasionally, the ulceration in the mouth is so severe and painful that you are unable to drink and become dehydrated. It may be therefore necessary for you to be admitted to hospital and be given fluids through a drip.

Mild attacks affecting only the skin may require no treatment. A steroid cream may be helpful if there is itching of the skin. Severe attacks of erythema multiforme are rare but can be life threatening, particularly if there is widespread involvement of the skin, eye, mouth, genitalia and other parts of the body. Specialist input and hospitalisation will be required.

Recurrent attacks

An antiviral drug e.g. aciclovir or valaciclovir may be used to stop recurrent attacks if they are thought to be triggered by a virus (usually the cold sore virus: herpes simplex). The medication has few side effects; however, it may need to be taken for many months. If stopped, an attack may occur.

If you have recurrent erythema multiforme, despite taking antiviral drugs, then a short course of systemic corticosteroids (swallowed) may be necessary. Systemic steroids are not recommended to prevent the condition in the long term due to potential side effects. Other medications may be appropriate to suppress the immune system in severe, recurrent cases e.g. azathioprine.

What can I do?

- Keep your mouth as clean as possible to reduce the chances of ulcers becoming infected.
- Use mouthwashes on a regular basis as advised by your specialist.
- Keep up your fluid intake and have plenty of rest.
- If you have been prescribed antiviral drugs, take these every day for as long as recommended.



If you feel that you are developing a recurrence of erythema multiforme,
 contact your doctor or specialist as soon as possible.

Where can I get more information about erythema multiforme?

www.bad.org.uk.erythemamultiforme
http://dermnetnz.org/reactions/erythema-multiforme.html

This leaflet has been prepared by the British and Irish Society for Oral Medicine (BISOM). It is reviewed periodically to reflect relevant advances and improved understanding. Not all the information will be relevant to all patients. For individual advice please see your Oral Medicine specialist. The BISOM is not responsible for information on web sites where links are provided.

This leaflet is available online at www.bisom.org.uk

Review date: October 2022