



Geographic tongue (benign migratory glossitis)

What is geographic tongue?

Geographic tongue is characterised by irregularly shaped red, map-like smooth swollen patches on the tongue. A white border sometimes surrounds them. It is also known as benign migratory glossitis because the appearance is constantly changing. Although geographic tongue is benign (harmless) it may persist for months or longer, and often recurs.

Geographic tongue



Who gets geographic tongue?

Geographic tongue occurs in up to 2% of the population. It may occur in any race, age or sex. However, it appears more commonly in females than males and more frequently in adults.

What are the signs and symptoms?

Often there are no symptoms but burning or irritation of the tongue is common, particularly with hot or spicy foods. The discomfort may come and go over time and may worsen at certain times of a women's menstrual cycle or during pregnancy.

Lesions are usually confined to the tongue but they sometimes arise elsewhere in the mouth or on the lips.

What causes geographic tongue?

The exact cause is unknown but the following factors have been linked with the condition:

- It occurs more commonly in patients with [psoriasis](#), especially [pustular psoriasis](#)
- There are also associations with diabetes, anaemia, atopy (asthma and/or [eczema](#)) and stress
- In some patients particular foods seem to be a trigger, especially cheese
- Clustering within a family suggests genetic involvement
- Variation with the menstrual cycle suggests hormonal factors

What treatment is available?

Geographic tongue is a benign condition that usually resolves itself without causing any problems for the patient so most people do not require treatment. There is no known cure. If there are associated medical conditions, treatment of these may improve the appearance of the tongue.

Discomfort may be treated with a mouth gargle or rinse containing antiseptic and [anaesthetic](#) agents. [Topical corticosteroids](#) may also be helpful for occasional use eg. triamcinolone in dental paste applied several times a day when required.

Related information

References:

On DermNet NZ:

- [Mouth problems](#)
- [Fissured tongue](#)

Other websites:

- [Geographic tongue](#) - emedicine dermatology, the online textbook

Books:

See the [DermNet NZ bookstore](#)

Author: Vanessa Ngan, staff writer

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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