



Patient Information Leaflet

Geographic Tongue

Cork University Dental
School & Hospital



This leaflet has been designed to explain geographic tongue and it contains answers to many frequently asked questions. If you have any other questions that the leaflet does not answer, or if you would like further information, please ask us.

What is geographic tongue?

Geographic tongue is a problem that mainly affects the upper surface of the tongue. It is quite common and is not usually painful. The pattern on the tongue looks like a map, hence the name «geographic». Other names for this condition have been: glossitis areata migrans, wandering rash of the tongue and erythema areata migrans. Geographic tongue is benign and there are no risks associated with it.

Who gets geographic tongue?

Worldwide, geographic tongue occurs in about 3 in every 100 people (3%). It is more common in adults than in children. It is twice as common in females as it is in males. It does not appear to be more common in any particular race or group.

What does geographic tongue look like?

There will be one or more clearly visible, smooth, red areas on the upper surface and/or sides of your tongue. These are usually surrounded by a raised white-greyish edge. The red patches can have various shapes and sizes and they are caused by the loss of some of the surface cells of the tongue.

Usually, the patches last for a short time in one area, disappear within a few days, and then appear in another area for no apparent reason. The problem often has times when it is worse and times when it disappears, with no apparent reason. It does not cause scars, pain or loss of taste. People sometimes get slight irritation in the tongue or they have increased sensitivity to salty, spicy and acidic foods.

Geographic tongue is often associated with fissured tongue but the cause for this is not known. Very rarely, circular red areas with whitish borders similar to the typical tongue patches can occur in other areas of the mouth lining, mainly on the lips and cheeks.

What causes geographic tongue?

The cause of geographic tongue is unknown but it may run in families. It **may** be more common in patients with psoriasis but the great majority of people with geographic tongue do not ever develop psoriasis.

Geographic tongue is not infectious. You cannot catch it from anybody else and you cannot give to anybody else. It is not caused by smoking. Very rarely it can be a side effect of lithium treatment.

Geographic tongue is more common in people with allergic diseases such as asthma, eczema and contact allergy. However, there is no evidence that allergy causes geographic tongue. There is a small possibility that hypersensitivity to dental materials, such as fillings, may be a cause in some people.

Taking hormones such as oral contraceptives may affect geographic tongue.

Things that **may** make it worse include stress, stomach problems, alcoholic drinks, salty, spicy and acidic foods, and other things such as some ingredients of toothpastes.

How is geographic tongue diagnosed?

Diagnosis of geographic tongue is based on listening to your story and looking at the appearance of your tongue. Very rarely, a biopsy may be needed if there is any doubt about the diagnosis.

How is geographic tongue treated?

No treatment is needed unless your tongue is uncomfortable.

If your tongue is uncomfortable then keeping your mouth very clean and using mild mouth rinses should help. If necessary, your specialist may prescribe other mouth rinses, tablets or creams. A very small number of patients with geographic tongue have low zinc levels. If this is the case then zinc tablets should help.

What will happen to my tongue?

Geographic tongue is a benign condition that does not become malignant. It has no consequences or risks that we know of. The only problem is the discomfort that some people have when the patches are present.

Can geographic tongue be prevented?

As we do not know the cause of geographic tongue we cannot prevent it. However, it is sensible advice to keep your mouth very clean and avoid things that might irritate your tongue, such as alcohol, spicy foods or irritants in toothpastes and mouth rinses.

This leaflet is available online at <http://www.ucc.ie/en/dentalschool/patients>