What is geographic tongue?
Geographic tongue is a non-serious inflammatory condition in which a changing pattern of smooth red patches, with a raised margin that can be white, yellow or grey, appear on the tongue.

The pattern resembles a relief map with mountain ridges, hence the term “geographic”.

The condition has many medical names, being known as erythema migrans (“erythema” = red, “migrans” because it migrates or moves around), “benign migratory glossitis” or “benign inflammatory glossitis”. “Glossitis” means inflammation of the tongue.

What are the symptoms and signs?
There are usually no symptoms — it is not painful or itchy, nor does it taste bad. However, some people can experience tenderness or stinging, especially with certain foods (usually spicy foods).

The main complaint from people is the unusual appearance of the tongue — which continually changes. The area of the tongue affected is the top surface and the edges.

What happens in geographic tongue?
Red patches develop and then over a few days coalesce to form rather large areas of raw-looking patches.

The papillae on the tongue surface rapidly regrow and the affected area returns to normal. The process moves around to other parts of the tongue with a major change occurring every three weeks.

The process may then subside and go into remission that may be complete or partial. However, it may return at a later time.

What is the cause?
The cause has not been clearly identified. It is considered to be an allergic or hypersensitivity reaction to certain factors to which the tongue is exposed. This could be a germ that usually lives in the mouth or a foodstuff.

This reaction causes excessive shedding of cells on the surface of the tongue.

What aggravates geographic tongue?
As a rule most people find no aggravating factors but some find that one or more of the following can aggravate it:
- Spicy foods.
- Stress.
- Tobacco.
- Marijuana.

Who gets geographic tongue?
Anyone can get it and it does not seem to run in families. It affects 1-2% of the population so that adds up to many thousands of people.

What tests need to be done?
No tests are necessary.

What are the risks and outlook?
There are no risks associated with this problem, hence the term “benign”. It is harmless and there have been no reported serious consequences.

The outlook is excellent. It is a self-limiting condition and usually settles after about six weeks. However, it may flare up again later.

What is the treatment for geographic tongue?
There is no specific treatment, drug or process that makes it disappear.

People can be reassured not to be concerned about it. If they are unaware of it and it causes no symptoms then no applications are recommended. However, it is advisable to avoid spicy foods and practise good oral hygiene, including cessation of smoking if it aggravates the condition.

People subject to considerable stress or anxiety should seek help to reduce the impact of these lifestyle factors.

For a tender tongue
Use Cepacaine gargles, 10mL three or four times a day for about 3-5 minutes and spit out.

For a persistent and troublesome tongue
Use a low-dose steroid spray as used to treat asthma, for example, beclomethasone 50µg. Spray on three times a day, try to leave it on the tongue for a couple of minutes. Don’t rinse out the mouth.