Oral submucous fibrosis

Information for patients
Charles Clifford Dental Hospital
What is oral submucous fibrosis?

Oral submucous fibrosis is a long-lasting disease that affects the mouth. It causes inflammation and progressive thickening of the lining of the mouth. It is associated with areca/betel nut chewing, areca nut being the main component of betel quid. It is a condition that increases the risk of developing cancer of the mouth.

Who does it affect?

The disease can affect anyone who chews betel quid regularly. Due to cultural reasons, it is more common in individuals from an Asian background. The disease can affect both men and women and tends to occur in middle age, although younger people may also be affected.

What symptoms may I experience?

Some patients have no symptoms, but symptoms may develop slowly over time. The lining of your mouth may appear pale when stretched (Figure 1). You may have a burning sensation in your mouth.

Teeth and gums are often discoloured by chemicals released from betel quid (Figure 2).

When the disease progresses further, the lining of the mouth may appear white and/or red and feel rough. It can also become quite painful. Many patients are restricted in how far they can open their mouth (Figure 1) and, in a few patients, tongue movement may be more difficult. In severe cases there may be difficulty in swallowing. In rare cases, deafness can be caused by damage to deeper tissues.
Figure 1. Pallor of left inner cheek lining and reduced mouth opening

Figure 2. Staining of teeth with betel nut use
What is the cause?

Chemicals released from chewing betel quid, such as arecoline, cause fibrosis. This results in thickening, scarring and tightening of the lining of the mouth. Betel nut is a carcinogen, which increases the risk of developing mouth cancer.

How is it diagnosed?

In order to make a diagnosis, we will ask you questions about your chewing habits and your symptoms. We will also check the appearance of the lining of your mouth.

To confirm the diagnosis, we may need to take a biopsy, whereby a sample of the lining of your mouth is taken and examined under a microscope.

Occasionally blood tests may be required to rule out other causes of a sore mouth.

How is it treated?

Betel quid chewing is a major risk to health and stopping the habit is essential. Once you develop the disease it is very difficult to reverse previous damage and it can worsen over time.

Physiotherapy and mouth opening exercises may be helpful to improve your ability to open your mouth.

In some cases we may prescribe medications to help reduce inflammation and further thickening. However there is limited good evidence of the benefits of such treatment. It is important to maintain good oral hygiene.

In severe cases surgery may be required to help improve mouth opening.
Will it cause cancer?

Having oral submucous fibrosis does not mean you have cancer but it increases the risk of developing cancer of the mouth.

Regular follow up is therefore important to look for any changes in the mouth.

Other sources of information
