

Cancer Association of South Africa (CANSA)



Fact Sheet on Leukoplakia

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Introduction

Leukoplakia (also sometimes referred to as leucoplasia, leukokeratosis, leukoplasia, idiopathic leukoplakia, idiopathic keratosis, or idiopathic white patch), normally refers to a condition where areas of keratosis (a horny growth) appear as firmly attached white patches on the mucous membranes of the oral cavity, although the term is sometimes used for white patches of other gastrointestinal tract mucosal sites, or mucosal surfaces of the urinary tract and genitals. (Wikipedia).



[Picture Credit: Leukoplakia]

Leukoplakia

Leukoplakia is a white or grey patch that develops on the tongue, the inside of the cheek, or on the floor of the mouth. It is the mouth's reaction to chronic irritation of the mucous membranes of the mouth. Leukoplakia patches can also develop on the female genital area; however, the cause of this is unknown.

Leukoplakia patches can occur at any time in one's life, but it is most common in senior adults.

'Hairy' leukoplakia of the mouth is an unusual form of leukoplakia (caused by the Epstein-Barr virus) that is seen only in people who are infected with HIV, have Aids, or Aids-related complex. It consists of fuzzy, white patches on the tongue (hence, its name) and less frequently, elsewhere in the mouth. It may resemble thrush, an infection caused by the fungus *Candida* which, in adults, usually occurs if one's immune system is not working properly. Thrush may often be one of the first signs of infection with the HIV virus (WebMD).



[Picture Credit: Hairy Leukoplakia]

Complications of Leukoplakia

Leukoplakia usually does not cause permanent damage to tissues in one's mouth. However, oral cancer is a potentially serious complication of leukoplakia. Oral cancers often form near leukoplakia patches, and the patches themselves may show cancerous changes. Even after leukoplakia patches are removed, the risk of oral cancer remains.

'Hairy' leukoplakia, on the other hand, is not painful and is not likely to lead to cancer. But it may indicate HIV infection or Aids. (Mayo Clinic).

Incidence of Cancer of the Mouth in South Africa

According to the National Cancer Registry (2010) the following number of cancer of the mouth cases was histologically diagnosed in South Africa during 2010:

Group - Males 2010	No of Cases	Lifetime Risk	Percentage of All Cancers
All males	395	1:381	1,45%
Asian males	15	1:319	2,00%
Black males	229	1:432	2,16%
Coloured males	68	1:215	2,13%
White males	84	1:371	0,66%

Group - Females 2010	No of Cases	Lifetime Risk	Percentage of All Cancers
All females	197	1:1 008	0,66%
Asian females	13	1:618	1,39%
Black females	93	1:1 480	0,60%
Coloured females	32	1:547	1,03%
White females	59	1:566	0,58%

The frequency of histologically diagnosed cases of cancer of the mouth in South Africa for 2010 was as follows (National Cancer Registry, 2010):

Group - Males 2010	0 – 19 Years	20 – 29 Years	30 – 39 Years	40 – 49 Years	50 – 59 Years	60 – 69 Years	70 – 79 Years	80+ Years
All males	0	1	12	68	142	106	42	14
Asian males	0	0	0	1	4	6	1	1
Black males	0	1	8	41	80	51	26	5
Coloured males	0	0	3	14	21	17	7	2
White males	0	0	1	11	29	26	6	6

Group - Females 2010	0 – 19 Years	20 – 29 Years	30 – 39 Years	40 – 49 Years	50 – 59 Years	60 – 69 Years	70 – 79 Years	80+ Years
All females	1	12	5	27	39	55	39	15
Asian females	0	0	0	2	2	5	1	2
Black females	0	10	4	5	18	25	18	8
Coloured females	0	0	0	7	9	8	5	1
White females	1	2	0	12	9	15	14	4

N.B. In the event that the totals in any of the above tables do not tally, this may be the result of uncertainties as to the age, race or sex of the individual. The totals for 'all males' and 'all females', however, always reflect the correct totals.

Symptoms of Leukoplakia

Leukoplakia can have various appearances. Changes usually occur on the gums, the insides of the cheeks, the bottom of the mouth and, sometimes, the tongue.

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Leukoplakia may appear:

- White or greyish in patches that cannot be wiped away
- Irregular or flat-textured
- Thickened or hardened in areas
- Along with raised, red lesions (erythroplakia), which are more likely to show precancerous changes

A type of leukoplakia called 'hairy' leukoplakia primarily affects people whose immune systems have been weakened by medications or disease, especially HIV/Aids. Hairy leukoplakia causes fuzzy, white patches that resemble folds or ridges on the sides of the tongue. It is often mistaken for oral thrush - an infection marked by creamy white patches, which can be wiped away, on the area that extends from the back of the throat to the top of the oesophagus (pharynx) and the insides of the cheeks. Oral thrush also is common in people with HIV/Aids.

When to see a doctor - sometimes mouth sores can be annoying or painful without being harmful, but in other cases, mouth problems can indicate a more serious condition.

One should see a dentist or doctor if any of the following are present:

- White plaques or sores in the mouth that do not heal on their own within two weeks
- Lumps or white, red or dark patches in the mouth
- Persistent changes in the tissues of the mouth

(Mayo Clinic).

Diagnosis of Leukoplakia

Leukoplakia is generally diagnosed with an oral examination. Many patients mistake the condition for oral thrush. Thrush is a yeast infection of the mouth. The patches it causes are usually softer than leukoplakia patches. They may bleed more easily.

During a physical examination, the doctor or dentist can confirm if the patches are leukoplakia. Other tests may be needed to confirm the cause. With treatment, one may be able to prevent future patches from developing.

If a patch looks suspicious, the doctor or dentist will do a biopsy. A small tissue sample is sent to a pathologist for diagnosis. The goal is to rule out the possibility of oral cancer. (Healthline).

Treatment of Leukoplakia

Surgical excision of oral leukoplakia (OL) may be considered. Frequent clinical observation accompanied by photographic records is recommended.

Because of the unpredictable behaviour of dysplastic lesions, immediately obtain a biopsy on any areas that are suggestive or that change in appearance.

Cryotherapy ablation and carbon dioxide laser ablation are also used. The area heals rapidly, and apparently healthy mucosa is left behind. However, uncertainty remains regarding the risk of invasive carcinomas subsequently arising in sites previously treated.

Stopping smoking - if smoking or using other tobacco products, the most effective form of treatment for leukoplakia is to stop. Avoiding tobacco can cause a leukoplakia patch to slowly disappear and may also significantly reduce any risk of developing mouth cancer.

Reducing alcohol - giving up alcohol or reducing alcohol consumption may reduce the size of a leukoplakia patch or cause it to disappear entirely. As with stopping smoking, avoiding alcohol or limiting alcohol intake will reduce the risk of developing oral cancer. (Medscape; NHS Choices).

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