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Hairy leukoplakia

What is hairy leukoplakia?

Hairy leukoplakia is a condition that is characterised by irregular white patches on the side of the tongue and occasionally elsewhere on the tongue or in the mouth. It is a form of leukoplakia, which refers to white patches on the mucous membranes of the mouth often arising in response to chronic irritation. Hairy leukoplakia occurs primarily in HIV-positive individuals.

What are the signs and symptoms of hairy leukoplakia?

When associated with [HIV or AIDS](#), hairy leukoplakia may be one of the first signs of infection with HIV. It was originally thought that this condition only ever occurred in people with HIV but there have since been cases in other people with suppressed immune systems such as organ transplant recipients and chemotherapy patients. It is often the first sign that the immune system is weakening and that the person may be at increased risk of a more serious infection waiting to manifest.

Symptoms and signs of hairy leukoplakia include:

- Irregular non-painful white patches on the sides of the tongue and less frequently elsewhere on the tongue or in the mouth
- Patches look corrugated or folded in appearance with tiny fuzzy hair-like protrusions running along the folds
- Patches look similar to [Candida](#) infection ([oral thrush](#)), except hairy leukoplakia lesions cannot be moved or dislodged

What causes hairy leukoplakia?

Hairy leukoplakia is associated with Epstein-Barr virus (EBV), the cause of [glandular fever](#), as EBV receptors have been found in surrounding normal mucosal surfaces. It is unclear whether hairy leukoplakia develops after superinfection with EBV or activation of a latent infection due to a weakening of the immune system.

Hairy leukoplakia has also been found in patients with [Behcet syndrome](#) and ulcerative colitis. In addition, men who are HIV positive who smoke more than a pack of cigarettes a day are at much greater risk of developing the condition. The risk of developing hairy leukoplakia doubles with each 300-unit decrease in CD4 count.

How is the diagnosis made?

Diagnosis is usually made by clinical assessment. Sometimes it is mistaken for Candida infection and treated with antifungal agents, which hairy leukoplakia does not respond to. Diagnosis can be confirmed by examining a biopsy sample under the microscope.

Patients presenting with hairy leukoplakia who do not have a diagnosis of HIV or AIDS should undergo a thorough workup to evaluate for HIV infection or causes of immunosuppression.

What is the treatment for hairy leukoplakia?

Hairy leukoplakia is not usually treated specifically for itself. Treatment of the underlying cause such as treating HIV or AIDS with anti-retroviral medications usually helps to resolve lesions. If patients are not taking anti-HIV therapy and hairy leukoplakia causes pain, interferes with eating or affects the voice, antiviral medication with [aciclovir](#) or ganciclovir may be used to treat the condition. However, lesions may reappear when antiviral treatment is stopped. Secondary infection with Candida may be treated using [antifungal medication](#).

Related information

References:

- Book: Textbook of Dermatology. Ed Rook A, Wilkinson DS, Ebling FJB, Champion RH, Burton JL. Fourth edition. Blackwell Scientific Publications.

On DermNet NZ:

- [Skin conditions relating to HIV infection](#)

Other websites:

- [Hairy Leukoplakia](#) - emedicine dermatology, the online textbook

Books about skin diseases:

See the [DermNet NZ bookstore](#)

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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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