

Reaction to Antibiotics Gave Woman 'Black Hairy Tongue'



Left: The rare case of black hairy tongue. Right: The same woman four weeks after minocycline was discontinued.

A new report in the *New England Journal of Medicine* describes a particularly severe case of black hairy tongue (pictured). Image: Yasir Hamad, M.D., and David K. Warren, M.D./NEJM

While recovering in hospital after a serious car accident, a 55-year-old woman from Missouri began to complain of nausea and a bad taste in her mouth. A subsequent oral examination revealed an alarming sight—the patient’s tongue had turned black and was covered in hair-like structures. But while this rare condition looks serious, it’s actually harmless.

A new [case report](#) published today in the *New England Journal of Medicine* chronicles a rare case of black hairy tongue, a condition otherwise known as *lingua villosa nigra*.

After a severe injury in which both of her legs were crushed, an unnamed woman was sent to hospital, according to the case study. While recuperating, an infection developed in one of her injuries. The medical team put her on an antibiotic regimen consisting of meropenem, which she received intravenously, and minocycline, which was administered orally.

A week later, the patient’s tongue began to take on a brownish-black hue. She complained of feeling nauseous, and said she had a bad taste in her mouth. The patient’s medical team diagnosed her as having black hairy tongue, with a reaction to the minocycline being the likely cause.

Hairy tongue is a benign and surprisingly common condition, but most of the time it appears yellowish, and not the stark black as seen in this particular case. In the U.S., it’s known to affect about 1 percent of the population, but in some parts of the world up to 10 percent of people have it, according to David Warren, a co-author of the new report and a professor of medicine at Washington University School of Medicine.

It happens when the bumps on the top surface of the tongue, the filiform papillae, grow unusually long. These tiny knobs become elongated, ranging in length from 1 millimeter to 18 millimeters in length. So technically speaking, it's not actually hair growing from the tongue.

"If you look at the surface of tongue closely you will see it looks like sandpaper. The filiform papillae are what form the rough surface," Warren told Gizmodo. "They are covered with keratin, which is the same protein as in your skin. Normally, this outer layer of the papillae is being continuously rubbed off when we eat. In hairy tongue, for various reasons, that layer grows faster than it can be rubbed off, so the papillae become longer. Changes in the types of bacteria that normally live in the mouth can cause the pigment to develop."

It's not totally clear why minocycline can cause black hairy tongue, but Warren said it might be altering the types of bacteria that live in the mouth, allowing some species to proliferate that cause the pigment. Other antibiotics and medications also have been associated with the condition, as have smoking, poor oral care, heavy black tea and coffee consumption, and radiation treatment for head and neck cancer, Warren said. Thankfully, black hairy tongue is reversible, and there are no long-term health effects.

"Hairy black tongue can be very disturbing because of how it looks, but in general it is benign," said Warren. "Some people with hairy black tongue report having irritation in their mouths, a bad taste in their mouths, food not tasting right, or bad breath. The treatment for hairy black tongue involves removing food and drinks from your diet which are known to cause it, quitting smoking, and having good oral hygiene. Gently brushing the top of the tongue with a soft toothbrush can also help. If those steps do not work, if they are on a medication that is known to cause hairy black tongue, or if someone is very concerned about it, they should see their doctor."

Recent Video from Gizmodo [View More >](#)

The Best Way to Apply Sunscreen to Your Face, Revealed by a UV Camera
8/31/18 10:20am

In this case, the woman was taken off minocycline and put on a different set of antibiotics. She was also told to practice better oral hygiene. Four weeks after the minocycline was discontinued, her tongue was back to normal.

Which undoubtedly must have come as a great relief to the patient.

[\[New England Journal of Medicine\]](#)



Medical EXPOSE

<http://www.medicalexpose.com/>