

Black hairy tongue due to antibiotics

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DESCRIPTION

A woman in her 80s with diabetes mellitus was admitted to the hospital due to renal abscess, which improved with intravenous ampicillin-sulbactam therapy and drainage. Twenty-eight days after the initiation of antibiotic therapy, black discoloration developed on her tongue (figure 1A). She was diagnosed with antibiotic-induced black hairy tongue based on characteristic visual inspection and advised to practice good oral hygiene. She was reluctant to switch to a different antibiotic since she had a documented cephalosporin allergy. Therefore, we informed her that there was a possibility of improvement without changing antibiotics, and she elected to continue with the current therapy and maintain good oral hygiene. Two weeks after diagnosis, despite the continued antibiotic therapy, the tongue discoloration started resolving and turned brownish (figure 1B). Three months after antibiotic therapy completion, her tongue returned to almost normal (figure 1C).

Black hairy tongue, also known as *lingua villosa nigra*, is a rare but striking benign condition characterised by defective desquamation and hypertrophy of the tongue filiform papillae, with black tongue discoloration. It can be caused by various factors, such as medications, alcohol and smoking, poor oral hygiene, oral lavage and underlying systemic conditions, such as malignancy.¹ Several antibiotics, including minocycline, doxycycline, erythromycin, linezolid, amoxicillin-clavulanate, metronidazole and piperacillin-tazobactam, have been reported to cause black hairy tongue.² Although the literature review generally reported an onset period of 14 days, there have been reports of onset periods as long as 7 weeks or 5 months.² The optimal treatment remains unclear. However, the condition can be improved by the discontinuation of the causative

Patient's perspective

When the infection subsided, I noticed that my tongue had turned black while washing my face. I was surprised, of course, and I was sad because I thought I was going to die. I consulted a doctor and was relieved to hear that the condition could be improved by cleaning my mouth. I then made a conscious effort to keep my mouth clean. Gradually, the black part of my tongue began to peel off, and now it is almost back to normal.

Learning points

- ▶ Black hairy tongue is a rare but striking benign condition characterised by defective desquamation and hypertrophy of the tongue filiform papillae, with black tongue discoloration.
- ▶ Several antibiotics have been reported to cause black hairy tongue.
- ▶ Treatment includes discontinuing the causative agents, if possible, and maintaining good oral hygiene.

agents, if possible, and by maintaining good oral hygiene. In our case, practicing good oral hygiene helped to improve the condition even during antibiotic therapy.

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Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

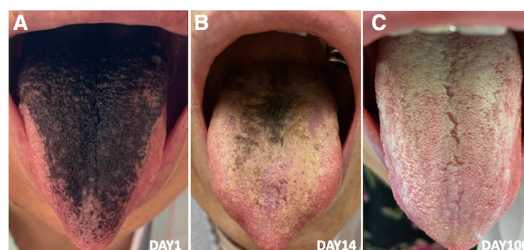


Figure 1 Serial photographs of black hairy tongue. (A) Photograph obtained 1 month after antibiotic initiation showing a black discoloration of the patient's tongue. (B) After 2 weeks, there is resolution of the black discoloration, with the colour turning brownish. (C) Three months after antibiotic therapy completion, the patient's tongue appears almost normal.

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