

CLINICAL IMAGES

Black hairy tongue in an infant

Andreas Körber MD, Nadine Voshege MD

Competing interests: None declared.

This article has been peer reviewed.

Affiliation: From the Department of Dermatology, University of Essen, Essen, Germany

Correspondence to: Dr. Andreas Körber, antikoerper@hotmail.com

CMAJ 2012, DOI:10.1503/cmaj.111013



Figure 1: Black discoloration of the tongue of an eight-week-old infant.



Figure 2: Three weeks later, the discoloration had completely resolved.

An eight-week-old infant was referred to our clinic because of a four-week history of black discoloration of the tongue (Figure 1). The infant's birth history was unremarkable, and he had no history of infections or antibiotic use. There was no family history of Peutz–Jegher syndrome, von Recklinghausen neurofibromatosis or Addison disease. We biopsied a tissue sample from the tongue to exclude melanosis. Three weeks later, the discoloration had resolved without therapy (Figure 2). The biopsy results showed mixed bacterial and fungal colonization but no melanocytes.

Black hairy tongue, also known as *lingua villosa nigra*, is a painless, benign condition characterized by an abnormal brownish–black coating of the dorsal surface of the tongue. Although its exact pathogenesis is unclear, it is thought to be related to defective desquamation and reactive hypertrophy of the filiform papillae.¹ Symptoms may include nausea, halitosis and alterations in taste. Black hairy tongue usually appears in people over age 40 years with a history of poor oral

hygiene, smoking and antibiotic use. Black hairy tongue has also been reported following stem cell transplantation. It is uncommon in infants.^{2,3}

We are unaware of treatment guidelines for black hairy tongue. In our experience, therapeutic options of modest benefit include increasing hydration and salivation (e.g., chewing gum), discontinuing smoking, brushing the tongue with a soft toothbrush after application of 40% urea, or applying topical retinoids or salicylic acid. Rarely, surgical excision is used to treat the condition. In adults, black hairy tongue can persist for years. Response to therapy depends on underlying conditions and compliance with therapy. In infants, black hairy tongue is most often self-limiting and resolves within weeks.²

References

1. Körber A, Dissemmond J. Black hairy tongue. *N Engl J Med* 2006;354:67.
2. Pouloupoulos AK, Antoniadis DZ, Epivatianos A, et al. Black hairy tongue in a 2-month-old infant. *J Paediatr Child Health* 2008;44:377-9.
3. Thompson DF, Kessler TL. Drug-induced black hairy tongue. *Pharmacotherapy* 2010;30:585-93.