



Internal Medicine Flashcard

Black tongue

Yi-Chun Lai*



School of Medicine, National Yang-Ming University, Taipei, Taiwan, Republic of China
 Institute of Hospital and Health Care Administration, National Yang-Ming University, Taipei, Taiwan, Republic of China
 Division of Chest Medicine, Department of Medicine, National Yang-Ming University Hospital, Yilan, Taiwan, Republic of China

ARTICLE INFO

Article history:

Received 17 March 2017

Received in revised form 30 April 2017

Accepted 3 July 2017

Available online 14 July 2017

1. Case presentation

This 22 years old woman was admitted for left upper lung pneumonia. She denied any systemic disease and never smoked. After antibiotic with ceftriaxone 2 g per-day intravenous injection, the clinical symptoms, such as fever, cough subsided. Chest x ray revealed gradually resolution of pneumonia patch. However, her tongue became black [Fig. 1a] after 5 days ceftriaxone use. Even she cleaned her tongue base with toothbrush and mouthwash regularly, but the tongue color was still dark. We collected culture from tongue and yield *candida dubliniensis* [Fig. 1b]. Then, we changed antibiotic with levofloxacin 500 mg per-day, but she still got black tongue. After we discontinued the antibiotic and encouraged oral gargling, the tongue returned to pink after ceasing antibiotic 3 days later.

2. Discussion

Black tongue after antibiotic was seldom seen in current era. Today, we presented a case treated for pneumonia and developed a black tongue. Black tongue developed by filiform papillae with dark discoloration and turned to be black appearance [1]. It is often a self-limit and harmless condition. Black tongue usually associated with smoke, poor oral hygiene, antibiotic use and immunocompromised host [2,3]. Antibiotics use may disrupt the normal balance of bacteria and fungus, and made the fungus overgrowth in the mouth. The effective treatment was to encourage oral hygiene and sometimes need oral antifungal agent treatment.

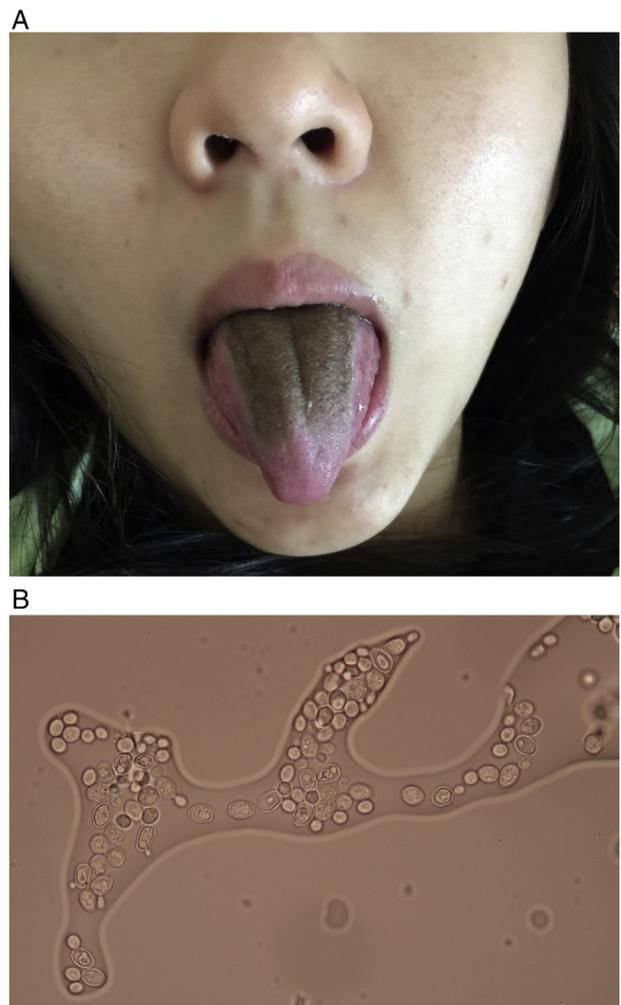


Fig. 1. a) showed the black color of tongue after 5 days ceftriaxone use, b) revealed *candida dubliniensis* isolated from the patient's tongue.

* No. 152, Xin-Min Road, Yilan, 26042, Taiwan, Republic of China.

References

- [1] Thompson DF, Kessler TL. Drug-induced black hairy tongue. *Pharmacotherapy* 2010; 30:585–93.
- [2] Sarti GM, Haddy RI, Schaffer D. Black hairy tongue. *Am Fam Physician* 1990;41: 1751–5.
- [3] Abdollahi M, Radfar M. A review of drug-induced oral reactions. *J Contemp Dent Pract* 2003;4:10–31.