Palm atheroma infection caused by *Raoultella planticola*

Naoki Yoshida, Yoshihiko Tsuchida

Department of Orthopedic Trauma Surgery, Shonankamakura General Hospital, Kanagawa, Japan

Correspondence to
Dr Naoki Yoshida, n_yoshida@shonankamakura.or.jp

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DESCRIPTION

A 74-year-old man presented to the emergency department with pain in the left hand. He had a history of lung carcinoma and was treated with chemotherapy for 2 years. On physical examination, his left hand was found to exhibit swelling and redness. There was an atheroma at the base of his middle finger, which was the most painful area (figure 1-A,B). He was prescribed cephalexin 2 g daily and ordered to see an orthopaedic surgeon the next day. However, the next day, his left hand became worse. There was increased swelling, redness, pain and pus (figure 1-C,D). The patient was treated with surgical drainage and intravenous cefazolin 2 g daily to control the infection (figure 2). A week later, bacterial isolation analysis revealed that the causative agent was *Raoultella planticola*. He was switched to ceftriaxone based on sensitivities and prior literature on the treatment of this infection. He received 4 days of intravenous ceftriaxone 2 g daily followed by oral levofloxacin 500 mg daily for an additional 21 days. He achieved a favourable outcome at the 2-month follow-up.

Raoultella species belonged to the genus *Klebsiella* until the late 1990s.[1] *R. planticola* is found in water, soil and foliage.[2] *R. planticola* has been found to cause urinary tract infections, cholangitis, cholecystitis, pneumonia and soft tissue infection.[1] However, it is an extremely rare cause of infection in humans and is an opportunistic pathogen in immunocompromised patients with malignancies, chronic kidney disease and diabetes mellitus or in recipients of solid organ transplants.[3] In the context of palm atheroma infections in immunocompromised patients, it is important to consider the possibility of *R. planticola* infections being under-reported because of previous misidentification as *Klebsiella*.

Figure 1 (A) Clinical photograph depicting the (A) left palm and (B) back of the left hand on the first day. (C) Clinical photograph depicting the left palm on the second day. Pus was present in the wound. (D) Clinical photograph depicts the back of the left hand on the second day. There was increased swelling and redness.

Figure 2 Clinical photograph depicting the surgical drainage.

Learning points

- *Raoultella planticola* is an extremely rare cause of infection in humans.
- *R. planticola* is likely under-reported because of previous misidentification as *Klebsiella*.

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