



Case illustrated

Pasteurella multocida chest wall abscess without wounds

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A 79-year-old Japanese man presented to our hospital with an 18-day history of fever and right-sided chest pain. The patient had undergone surgery for rectal cancer 2 years previously. Although he had three pet cats in his home, he had no history of cat bites, scratches, or licks. On examination, his blood pressure was 92/57 mmHg and temperature was 37.1 °C; a soft subcutaneous mass without obvious wounds was noted in the right-sided chest (Fig. 1). Laboratory data revealed leukocytosis ($33.3 \times 10^3/\mu\text{L}$ with 94.5% neutrophils) and elevated C-reactive protein levels (11.7 mg/dL). On admission, contrast-enhanced computed tomography revealed a subcutaneous multilocular abscess in the right-sided chest (Fig. 2). Piperacillin–tazobactam (4.5 g every 8 h) was empirically administered, and surgical drainage was performed. Although the abscess culture grew *Pasteurella multocida*, the two sets of blood cultures obtained on admission grew no microorganisms. Based on the results of susceptibility tests, the antimicrobial therapy was changed to ampicillin–sulbactam (3 g every 6 h). The patient was discharged on day 22, and the antimicrobial therapy was changed to oral amoxicillin (750 mg/day). After a 9-week antimicrobial course, the patient recovered without any obvious sequelae.

P. multocida is a non-motile, facultatively anaerobic, gram-negative coccobacillus, which is a part of the microbiota of domesticated and wild animals (particularly cats and dogs) [1]. It can cause human infections, generally as a result of cat and dog bites, scratches, and licks [2]. However, our patient had no such animal contact. This case highlights that *P. multocida* infections can occur without bites, scratches, or licks. Although noting the history of animal contact is important, physicians should be aware of the potential risk of *P. multocida* infections in cat and dog owners without a history of such contact.

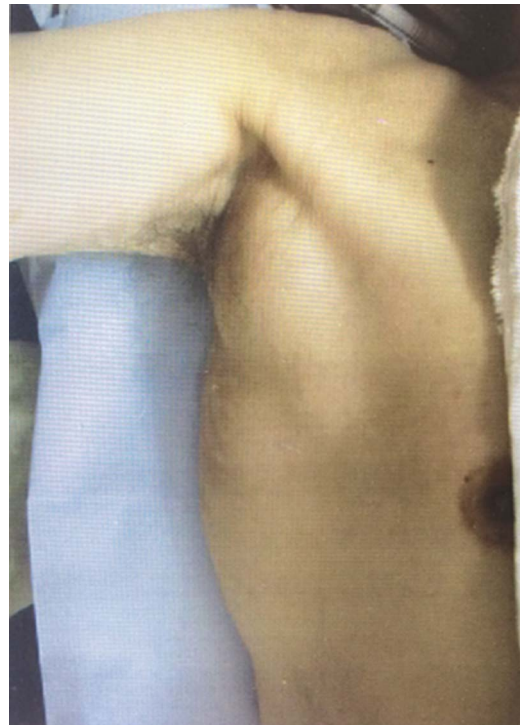


Fig. 1. Photograph taken on admission, which shows a subcutaneous mass in the right-sided chest.

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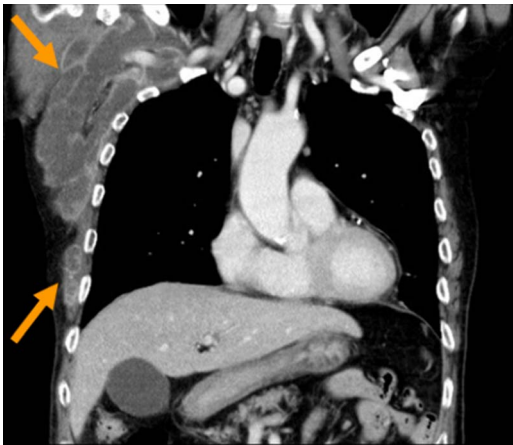


Fig. 2. Chest computed tomography showing a multilocular abscess in the right-sided chest (arrows).

Conflicts of interest

None.

Acknowledgement

None

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