

Case illustrated

Psoas abscess secondary to paravertebral inflammation

Yoshito Nishimura*, Fumio Otsuka

Department of General Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama 700-8558, Japan

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A 62-year-old man with hepatitis C cirrhosis presented to the emergency department reporting fever and lower back pain for 1 week. Physical examination revealed severe lower spinal percussion tenderness and left psoas sign. Abdominal CT showed paravertebral inflammation without abscess formations (Fig. 1, arrows). Lumbar MRI showed no signs of osteomyelitis. Because of persistent fever, follow-up CT was performed, which revealed continuous left psoas abscesses (Fig. 2, arrow) across the lumbar paravertebral compartment (Fig. 2, arrowhead). Because the lumbar paravertebral space is anatomically continuous with the iliopsoas muscles, paravertebral inflammation can cause psoas abscess [1]. CT-guided drainage of the abscesses revealed purulent fluid (Fig. 3). Methicillin-sensitive *Staphylococcus aureus* grew from the culture. The patient was successfully treated with cefazolin for 6 weeks. Previous reports suggest that indolent bacteria such as tuberculosis and brucella can cause paravertebral infections [2,3]. Moreover, malignancy may be found in the context of paravertebral abscess [4]. To exclude these disease, drainage is essential. In cases with fever and back pain of unknown cause, paravertebral space should be given attention.

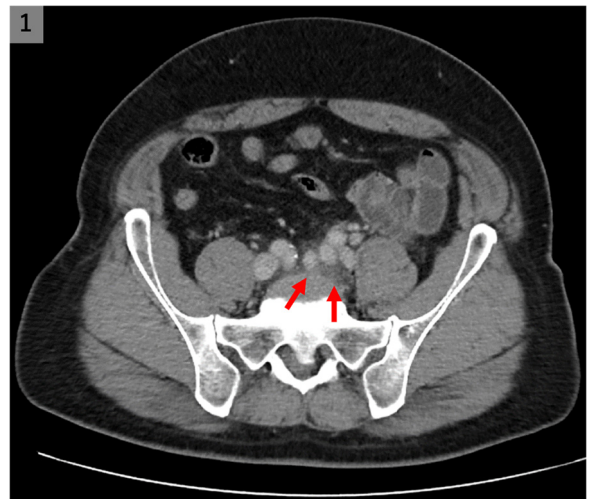


Fig. 1. Non-contrast abdominal CT showed paravertebral cellulitis without abscess formations (arrows).

* Corresponding author at: Department of General Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, 2-5-1 Shikata-cho, Kita-ku, Okayama 700-8558, Japan.

E-mail address: me421060@s.okayama-u.ac.jp (Y. Nishimura).



Fig. 2. Follow-up non-contrast CT revealed left psoas abscesses (**arrow**) and paravertebral abscess (**arrowhead**).

Conflict of interest

Nothing to disclose.

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Ethical approval

Informed consent was obtained from the patient for this case report and any accompanying images.

Author contribution statements

Y.N: Yoshito Nishimura: Conceptualization, Methodology, Software, Resources, Writing – Original Draft, Visualization, F.O: Fumio Otsuka: Writing – Review & Editing, Supervision, Conceptualization: Y.N and F.O conceived of the presented idea. Methodology: A single case report planned by Y.N. Software: Microsoft Word and PowerPoint were used. Validation: Not applicable. Resources: A patient laboratory data, radiographical and specimen pictures were used with permission, collected by Y.N. Data Curation: Not applicable. Writing – Original Draft: Y.N wrote an original draft. Writing – Review & Editing: F.O reviewed the manuscript. Visualization: Y.N prepared the data. Supervision: F.O supervised the data.



Fig. 3. CT-guided drainage of the abscesses revealed purulent fluid.

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