A gigantic iliopsoas abscess in a patient with Alexander's disease

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TITLE

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ABSTRACT

Case presentation

Here we present a case of a gigantic iliopsoas abscess (IPA) that was discovered late because of Alexander's disease.

An IPA is a collection of pus within the compartments of the psoas major and iliopsoas muscles; IPA typically has three symptoms: fever, back pain, and limitation of hip motion, but patients with communication difficulties may be unable to report symptoms, which may delay detection of an IPA.

Because IPA are relatively easy to diagnose with computed tomography, physicians are encouraged to perform these studies immediately in such patients. Percutaneous drainage is a minimally invasive, efficient, and safe procedure with good clinical recovery. Rapid diagnosis and treatment can avoid serious infection and surgery.

Key Clinical Message:

This case highlights the importance of early diagnosis of iliopsoas abscess in patients with communication difficulties and appropriate treatment to prevent further complications.

Keywords

iliopsoas abscess, Percutaneous drainage, Alexander's disease

Main Text

CASE PRESENTATION

An elderly man over 70 years old with Alexander's disease (AD), a rare autosomal dominant leukodystrophy, presented to our hospital with fever and decreased blood oxygen saturation, which began two weeks prior. He visited the neurology department of our hospital nine years ago due to unsteady gait, dysarthria, and difficulty in swallowing and had been diagnosed with AD. Since then, his symptoms, such as ataxia of limbs, dysarthria, and dysphagia, progressed, and he underwent gastrostomy and tracheostomy surgery two years ago.

On examination, the patient had a blood pressure of 104/62 mmHg; pulse, 105 bpm; SpO2, 93% in room air; and fever, 37.9 °C. He had difficulties in swallowing; speaking, which made it difficult for him to complain about back or abdominal pain; poor coordination; and loss of motor control due to AD.

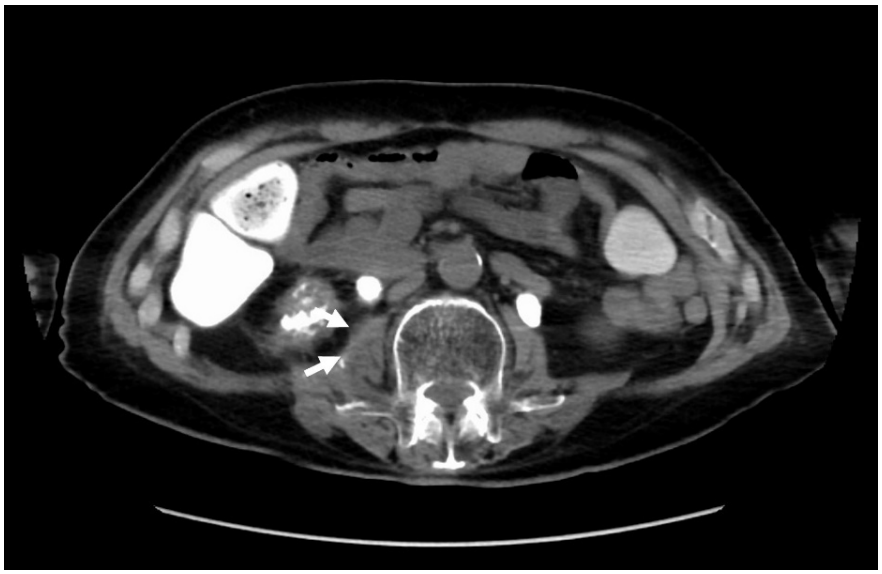
Laboratory studies demonstrated a white blood cell (WBC) count of 10,800 (reference value: <8000), erythrocyte sedimentation rate of 84 mm/h (reference value: <10 mm/h), and C-reactive protein (CRP) level of 5.69 mg/dL (reference value: <0.3 mg/dL). Blood culture revealed the presence of methicillin-resistant Staphylococcus aureus. Thoracic and abdominal computed tomography revealed partial atelectasis in the right lower lobe of the lung and infiltrative shadows in both lower lobes of the lung, as well as bilateral kidney stones, bladder stones, and hydronephrosis. An enlarged right psoas major muscle and iliopsoas muscle with a 70 × 80 mm low intensity area were observed.(Figure 1A) The margins were enhanced in a ring shape, which was considered as an abscess. The patient then underwent percutaneous drainage of the abscess. A total of 350 mL of fluid was aspirated (Figure 1B) and methicillin-resistant S. aureus was detected. After drainage, his fever disappeared, his WBC count decreased to 8000, and CRP to 0.72 mg/dL. However, four months after drainage, the abscess returned. Laboratory studies revealed a WBC count of 17,400 and CRP level of 9.23 mg/dL. Percutaneous drainage was performed again, and 400 mL of fluid was aspirated. Similar to the previous instance, the fever abated, and the inflammatory findings improved after drainage (CRP level, 0.72 mg/dL). There was no recurrence of the abscess for one year (Figure 2); however, a year after the second drainage, the patient expired due to respiratory failure caused by AD.

Image 1

(A)Axial view of abdominal computed tomography showing a gigantic right iliopsoas abscess (arrow). (B)Abscess more than 350 ml aspirated by percutaneous drainage.

Image 2

Axial view of abdominal computed tomography showing disappearance of right iliopsoas abscess (arrow).



DISCUSSION

In patients with difficulty in communicating, the inability to complain of symptoms may delay the detection of an iliopsoas abscess and cause it to grow to an excessive size. Iliopsoas abscess is easy to identify with a CT scan and ultrasonography. These examinations should be conducted quickly when fever causes communication problems.

Percutaneous drainage of the iliopsoas abscess is a minimally invasive, efficient, and safe procedure with good clinical recovery.[1,2,3] In many cases, surgery with a high risk of morbidity and mortality can be avoided. This procedure is a significant option for patients who are unable to undergo surgery due to poor clinical status or other contraindications.

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