

Giant extruded discal hernia mimicking an abscess within the psoas muscle: an unusual presentation of a common disease

Daniella Karassawa-Zanoni, Nitesh Shekhrjaka, Jack C. Kademian, Leonardo Furtado-Freitas

A 67-year-old woman presented with persistent lumbar pain which radiated down to bilateral lower extremities with associated weakness, numbness and tingling. Her symptoms were impairing her ambulation and did not improve significantly with medical treatment. She reported no fever and had no fever during the examinations he underwent. Patient had remote surgical history of anterior cervical discectomy with fusion and placement of spinal cord stimulators in the cervical and lumbar levels.

An initial computed tomography of the lumbar spine scan was requested and revealed diffuse degenerative disc disease in the lumbar spine, and a lesion within the right psoas muscle at the level of L3 with peripheral calcifications and air-fluid level (Figure a-c).

After the initial computed tomography, differential diagnoses include abscess, myositis ossificans, and extruded disc. The patient had no symptoms of infection and there was not significant fat stranding surrounding the lesion in the psoas muscle, making abscess less likely. Myositis ossificans can rarely involve the psoas muscle. Imaging characteristics showed peripheral mineralization. However, air-fluid levels are rarely seen in myositis ossificans.

After four months of supportive and pain treatment, follow-up computed tomography myelography showed that the lesion decreased in size, with resolution of the air-fluid level (Figure d-f).

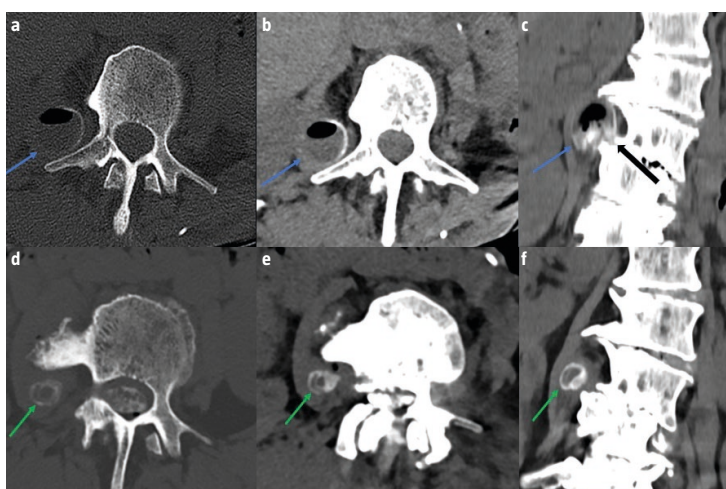


Figure. Lumbar spine computed tomography and computed tomography myelogram in the initial presentation (a-c) and after four months of follow-up treatment (d-f), respectively. Note is made for a lesion within the right psoas muscle at the level of L3 with peripheral calcifications and air-fluid level (blue arrows), with evolving decreased size and air-fluid level resolution (green arrows). The L3-L4 intervertebral disc communication is the clue for the correct diagnosis (black arrow).

Resolution of the lesion on follow-up computed tomography without surgical intervention or treatment with antibiotics makes the diagnosis of extruded disc more appropriate.

As demonstrated by our case, an extruded disc fragment shows continuity with the intervertebral disc. The most common pattern of disc migration is posterolateral, resulting in compression of the exiting or transiting nerve roots. Extraforaminal migration is rare and was reported in only 1,8% of cases in a study which analyzed 1,020 patients with extruded lumbar disc herniation [1].

Magnetic resonance imaging findings can be very similar in cases with disc migration to the psoas muscle and abscess. Both would demonstrate low to isointense signal on T₁-weighted images, hyperintense signal on T₂-weighted images, and rim-enhancement. Diffusion restriction would potentially differentiate them, being positive on a pyogenic abscess [2,3].

In our case, the patient had nerve stimulators in the cervical and lumbar levels, which were not compatible with magnetic resonance imaging, hence only computed tomography images were obtained. The clinical presenta-

Department of Radiology.
Division of Neuroradiology.
University of Iowa Hospitals &
Clinics. Iowa City, Iowa, United
States.

Correspondence:

Dr. Leonardo Furtado Freitas. 787
American Pharaoh Dr, 52240.
Iowa City (IA), USA.

E-mail:

leonardo-furtadofreitas@uiowa.
edu

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ORCID:

0000-0001-5240-8989 (D.K.Z.).
0000-0001-5173-8492 (N.S.).
0000-0002-8640-6655 (J.C.K.).
0000-0001-6944-4978 (L.F.F.).

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tion, back pain and absence of fever or other constitutional symptoms, is in favor of degenerative disc disease.

Some cases with these similar presentation and imaging findings may require further evaluation with computed tomography-guided biopsy, to exclude superimposed infection. For our patient, the evolution with spon-

taneous regression of the lesion was the final confirmatory statement for the diagnosis.

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