



Images in clinical rheumatology

68 years old woman with right leg weakness and colostasis

Mujer de 68 años de edad con debilidad en la extremidad inferior derecha y colostasis

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A 68-year-old female with lumbago and cholestasis

Clinical case

A 68-year-old woman, with no significant clinical history, who went to hospital because of a mechanical back pain, with progressive onset, accompanied by difficulty in walking due to a right leg weakness, which had started a week earlier. There was no fever, jaundice, itching or dark urine. No weight loss was reported or any other significant clinical data. The patient had no toxic habits.

The examination showed a slight pain on deep palpation in the mesentery and the musculoskeletal examination demonstrated limitation for active flexion in the lumbar spine, with positive Goldthwait signs and right psoas. The rest of the examination was insignificant, including muscle balance.

The haemogram and acute phase reactants were normal; the hepatic biochemistry showed the following values: GOT, 78 U/l; GPT, 267 U/l; GGT, 611 U/l; and AP, 477 U/l. Amylase, total bilirubin and its fractions were within normal limits, together with those of clotting times. Tumour markers were also normal, except for CA19-9 at 56.18 U/ml. Viral serology (hepatitis A, B and C), *Brucella*, *Salmonella*, blood cultures and Mantoux test were negative.

Evolution

The abdominal ultrasound showed an increase in the size of the pancreatic head with diffuse dilatation of the intra- and extrahepatic bile ducts, suggesting a pancreatic neoplasm.

The abdominal and lumbar spine MRI showed a space-occupying lesion in the pancreatic head with infiltration of mesenteric and portal veins, which remained permeable (portal vein diameter of

approximately 10mm), with an abrupt stop in the bile duct (diameter 10 mm) and in the pancreatic duct, with signs of malignancy. She also showed an infiltrative lesion in the right psoas muscle in close contact with the vertebrae, hyperintense with contrast enhancement in T2 and STIR (Figure 1 and Figure 2).

The endoscopic ultrasound showed a malignant neoplasm on the pancreatic head, with vascular invasion of the mesenteric vein and hepatic artery. Metastatic lymph nodes without liver metastasis, with obstruction of the bile and pancreatic duct, were also seen. A puncture was carried out on the iliac hypoechoic cystic lesions, obtaining matter with a histopathology suggestive of mucinous adenocarcinoma of the pancreas.

Diagnosis

Pseudo right psoas abscess of tumoral origin (mucinous carcinoma of the pancreas).

Discussion

The psoas muscle is in close anatomic contact with the abdominal and pelvic structures. The affection of these structures can show secondary extension to the iliopsoas muscles. The primary psoas abscesses are normally found in young males in the context of haematogenous spread, with *Staphylococcus aureus* being the germ isolated in the majority of cases.¹⁻³

Secondary psoas involvement generally occurs in elderly patients with other associated illnesses. The majority of cases are associated to digestive tract pathologies (Crohn's disease, diverticulitis, appendicitis, perforation of colon carcinoma, etc.), genitourinary disease, spondylodiscitis (TB, *Brucella*, pyogenic, etc.), vascular disease or surgical complications.

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Figures 1 and 2. Lumbar MRI: a lesion of approximately 4.9 cm, which infiltrates the right psoas muscle, in close contact with L2-L3 vertebrae, is identified.

Another less common psoas affection is due to the extension of neoplasms in the abdominal or pelvic structures (urinary tract, gastrointestinal tract or gynaecological origin).⁴⁻⁶

It is normally recommended that a CAT scan, ultrasound or MRI be carried out to diagnose psoas muscle pathology. The interest of our case comes from the clinical presentation of an invasive neoplasm in the pancreatic head (paresis of the right psoas) and the use of MRI in diagnosing it. Although there could have been a question of a probable infectious aetiology, this was eliminated by the absence of microbiological data and the results of the pathological anatomy. The patient was operated on, presenting good clinical evolution.

References

- Charalampopoulos A, Macreas A, Charalabopoulos A, Fotiadis C, Charalabopoulos K. Iliopsoas abscesses: Diagnostic, aetiologic and therapeutic approach in five patients with a literature review. *Scand J Gastroenterol.* 2009;44:594-9.
- Álvarez Múgica M, Jalón Monzón A, González Álvarez RC, Escaf Barmadah S, Martín Benito JL, Regadera Sejas J. Absceso primario de psoas por *S. pneumoniae*. *Actas Urol Esp.* 2006;30:943-6.
- Gezer A, Erkan S, Saygi E, Erel CT. Primary psoas muscle abscess diagnosed and treated during pregnancy: Case report and literature review. *Infect Dis Obstet Gynecol.* 2004;12:147-9.
- Kalra N, Aiyappan SK, Nijhawan R, Sharma SC, Khandelwal N. Metastatic carcinoma of cervix mimicking psoas abscess on imaging: A case report. *J Gynecol Oncol.* 2009;20:129-31.
- Corvera CU, Dunnican WJ, Blumgart LH, D'Angelica M. Recurrent invasive intraductal papillary mucinous carcinoma of the pancreas mimicking Pott disease: Review of the literature. *Pancreas.* 2006;32:321-4.
- Lee KN, Lee HL, Yoon JH. A case of mucinous adenocarcinoma of the colon presenting with psoas abscess. *Korean J Gastroenterol.* 2008;52:120-3.