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Scientific letters

Psoas and Neck Abscess by *Nocardia farcinica*☆

Absceso de psoas y cuello por *Nocardia farcinica*

Although it is not uncommon to diagnose *Nocardia* infections, the *farcinica* species, onset of clinical presentation, peculiar progression in the organism and consequent treatment make the case presented herein particularly unusual.

The patient is a 78-year-old obese male with renal insufficiency, hypertension and decompensated diabetes. He was admitted with general malaise, fever of 40 °C and severe pain under the left renal fossa. Work-up detected leukocytosis and neutrophilia, ESR 122 mm and negative urine culture. Imaging tests revealed left psoas abscess (Fig. 1), and ultrasound-guided percutaneous drainage was conducted. The cultures of the collected sample identified *Nocardia farcinica* sensitive to aminoglycosides and linezolid. IV antibiotic therapy was started with the latter at 600 mg/12 h.

Within 48 h, the patient began having ipsilateral dorsolumbar myalgia that irradiated cranially, making it impossible to sit. An MRI study detected a new abscess in the anterior left paraspinal region under the latissimus dorsi, coinciding with the tip of the catheter. Once withdrawn, the sample culture isolated *Nocardia farcinica* and *Pseudomonas aeruginosa* sensitive to quinolones, so ciprofloxacin was administered by IV at 200 mg/12 h.

Subclinical and apyretic for 4 days, a painless left supraclavicular bulge appeared with edema one week later. Cervical MRI images identified an organized collection under the trapezius progressing toward the scalenes (Fig. 1). During cervicotomy, a small part of the collection was removed, and two 25-mm reactive lymphadenopathies were obtained along with globose fibroconnective fragments; in the exudate, microscopic study identified acid-resistant Gram-positive coccobacillus structures, with no growth in cultures but congruent under microscopy with nocardiosis. Empirical treatment was initiated with co-trimoxazole. Wound revision surgery was conducted several times to clean the surgical bed, which prolonged the hospital stay by 55 days. At the time of discharge, the 3 foci had disappeared, and co-trimoxazole was maintained at 800/160 mg/12 h/3 months.

The caudocranial progression of abscess collections is explained by the lymphatic circulation. Ascending lymphangitis is associated with a limited group of microorganisms, including nocardiosis, sporotrichosis, atypical mycobacteria and actinomycosis.[1]

Nocardia is part of normal oral flora. It grows in sandy areas, wetlands and potentially polluted soils, and it can be acquired

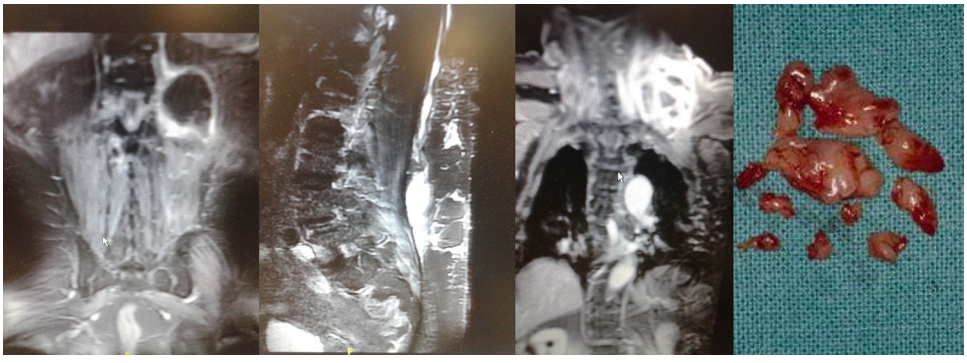

Fig. 1 – MRI image of the upward progression of the abscess collection in front of the left psoas muscle (station 1) at the superior paraspinal (station 2) and ipsilateral supraclavicular pretrapecial (station 3) areas, with appearance of the samples withdrawn.

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by direct cutaneous inoculation or inhalation.[2,3] Some 85% of case reports show concomitant involvement and/or immunosuppression, including chronic lung disease, diabetes, liver cirrhosis, autoimmune disorders, AIDS, oncological subjects, transplant recipients or those treated with glucocorticoids or immunosuppressants.[4]

Lymphatic or hematogenous dissemination allows this pathogen to reach any organ, and its main virulence factor is resistance to phagocytosis.[1,2] Traumatic implantation in subcutaneous cellular tissue generates a local inflammatory response with distant ulcerative-necrotizing nodules due to its endotoxins.

The most frequent clinical forms are pulmonary (50%), cerebral (35%–40%) and cutaneous (10%–15%) by *Nocardia asteroides* and *brasiliensis*.[1,3] Only in recent decades have cases of *farcinica* been reported. The patient described did not have any previous related wounds or infections contiguous to the iliopsoas, although his comorbidity would augment any surface contamination. It seems clear that the paraspinal infection was due to post-evacuation iatrogenesis.

The delayed and focalized appearance in the neck makes it necessary to consider a mechanism of ascending lymphangitis. This represents 25% of nodular lymphangitis, classic of inoculations in the lower extremities but extremely unusual in solitary and distant propagations,[2–4] although the lymph node reactivity reinforces this hypothesis. The hematogenous route cannot be justified without fever or systemic disease, which typically affects the CNS, eyes and kidneys.[2]

The exudate from surgical exposure provides samples for microbiological isolations. *Nocardia* is suspected in aerobiosis with Gram-positive staining and acid-alcohol resistance to groups of branched bacteria.

This diagnosis is definitive with various cultures (blood agar, Sabouraud dextrose, Löwenstein–Jensen or Thayer–Martin), identifying opaque, dry, faintly orange colonies at 37 °C. Casein, xanthine, hypoxanthine and tyrosine hydrolysis tests confirm the *farcinica* species, whose antibiotic resistance is especially significant. Sulfonamides continue to be the treatment of choice for 3 months (6 for mycetomas); effective alternatives include amikacin, imipenem, meropenem and third-generation cephalosporins. Linezolid is a good second-line agent for resistance or allergy.[2–4]

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Ewing's Sarcoma: Differential Diagnosis of Gastrointestinal Stromal Tumors (GIST)☆,☆☆

Sarcoma de Ewing atípico: un diagnóstico diferencial a tener en cuenta en los tumores del estroma gastrointestinal (GIST)

Gastrointestinal stromal tumors (GIST) are the most frequent mesenchymal tumors in the digestive tract. Most have a characteristic gain-of-function mutation of the c-KIT gene, which encodes the KIT receptor (CD117).[1] The availability of an inhibitor for said receptor, imatinib mesylate, plays an important role in the chemotherapy treatment of high-risk, metastatic and/or unresectable GIST.[2–4] For the anatomic pathology diagnosis of GIST, immunohistochemical staining is used. 95% express CD117 and DOG1, in addition to others markers such as CD34 (60%–70%), smooth muscle actin (15%–60%), S100 protein (10%) and desmin (rarely).[5] However, although the expression of

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