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DISSEMINATED NOCARDIOSIS IN A SYSTEMIC LUPUS ERYTHEMATOSUS PATIENT

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BACKGROUND

Nocardiosis is an infectious disease caused by *Nocardia*, which is a gram-positive bacillus and manifests as an opportunistic infection in immunocompromised hosts and can impact nearly every part of the human body.

CASE REPORT

A 48-year-old female patient, smoker, with recent (2 months) diagnosis of systemic lupus erythematosus (treated with azathioprine, methotrexate and hydroxychloroquine) was admitted to the emergency due to pain in the cervical region. C-reactive protein at admission was 336 mg/L and the erythrocyte sedimentation rate was 71 mm/h. A cervical tomography demonstrated an increase in volume of paravertebral soft tissue. Chest computed tomography evidenced a heterogeneous, lobulated opacity in the right lower lobe. After evaluation of the images, the patient was again asked about the clinical history. She then reported intense night sweating for at least two months associated with afternoon peaks of fever. She denied weight loss. During hospitalization, she started to present localized phlogistic signs in the right arm. Puncture of the liquid collection was performed, and bacterioscopic exam showed branched gram-positive bacilli; cultural test revealed *Nocardia* species. Treatment with imipenem associated with amikacin was started. Rheumatological investigation showed positive antinuclear antibodies (ANA, titer = 1:320), with dense fine speckled nuclear pattern, C3 = 172 mg/dL, C4 = 39 mg/L, positive anti-DNA (titer = 1/10), negative anti-Sm, and positive anti-SSA 240 U/mL. Serum levels of immunoglobulins (IgA, IgM and IgG) were within normal limits. Viral serologies (anti-HIV, VDRL, HBsAg, and anti-HCV) were negative. Due to the presence of multiple abscesses and neck pain, she also submitted to magnetic resonance imaging (MRI). A large cerebral expansive lesion was identified, with restriction to diffusion in the center and peripheral enhancement located in the left frontal region, with adjacent vasogenic edema. Multiple other lesions (measuring up to 0.7 cm) with the same characteristics were detected located in the supra and infratentorial compartments, compatible with the clinical hypothesis of abscesses. Cervical MRI revealed extensive lesion in the soft paravertebral tissues with infiltration of the dural sac. The patient underwent two neurosurgical procedures to approach therapeutically these abscesses. Despite the extent of the injuries, the patient did not present focal neurologic deficits or epileptic crises.

CONCLUSION

We present a case of nocardia abscesses to raise awareness about the possibility of this rare but potentially fatal condition.