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## Thoracic Endometriosis: The Role of Imaging<sup>☆</sup>



### Endometriosis torácica: papel de las técnicas de imagen

To the Editor:

We read with great interest the well-presented clinical note from Ucvet et al.,<sup>1</sup> describing 2 interesting cases of women with thoracic endometriosis. One of them had intermittent hemoptysis associated with her menstrual cycle, and the other had recurrent pneumothorax.

We would like to highlight the role of imaging techniques, particularly magnetic resonance imaging (MRI), as an important tool in the evaluation of patients with thoracic endometriosis. The length of time required for performing an MRI and the lack of follow-up devices compatible with MRI initially led to generally poor acceptance of this technique. In recent years, significant technical advances have been made in lung MRI, including parallel imaging and view sharing, time-resolved echo-shared angiography, and steady-state free precession sequences.<sup>2</sup> These techniques have reduced MRI capture time, have made it less sensitive to movement artifacts, and have improved spatial resolution. MRI does not require ionizing radiation or iodinated contrast, and is associated with less renal function deterioration than computed tomography. As a result of these improvements, MRI has become a useful tool in the evaluation of thoracic endometriosis, particularly pleural endometriosis.<sup>2</sup>

Pleural endometriosis can present in the form of pneumothorax, hemothorax and pleural nodes. Chest X-ray and computed tomography can reveal hydrothorax and/or pneumothorax, but are of little help in detecting associated pleural endometriosis nodules.<sup>3–5</sup> Studies have shown that MRI plays an important role in the evaluation of these patients. It not only identifies hydropneumothorax, but is also very accurate for detecting endometriosis nodules, given its greater ability to characterize hemorrhagic tissues.<sup>3,5</sup>

Endometrial foci are commonly seen in the form of hyperintense nodules on the pleural surface, but a different signal intensity can be observed in T1 and T2-weighted images, with variable diffusion restriction, depending on the age of the lesion. Pleural effusion may also show signal hyperintensity in T1-weighted sequences.<sup>5</sup>

A combination of surgery and hormone therapy appears to be the best therapeutic option. Various thoracic surgery techniques, such as diaphragmatic repair, pleurodesis, and resection or electrocoagulation of the endometrial deposits, have been used.<sup>1</sup> MRI-assisted identification and resection of endometrial deposits help to reduce recurrence rates. Thus, MRI may become an important tool for assisting the surgeon in cases of catamenial pneumothorax, by providing better evaluation of pleural endometriosis than computed tomography or chest X-ray.

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