

## Clinical Image

# Malignant pleural mesothelioma detected on ultrasound<sup>☆</sup>

## Mesotelioma pleural maligno visto por ecografía

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Malignant pleural masses include mesothelioma, lymphoma, and metastases. The ultrasound image shows irregular, sometimes nodular, thickening associated with significant pleural effusion (Fig. 1), characteristic of malignant pleural mesothelioma, as was subsequently confirmed in the histological study.<sup>1</sup>

The indication for ultrasound, in addition to the localization of small or encapsulated pleural effusions for aspiration or biopsy, includes the characterization of pleural fluid or surface, and guiding the point of entry of in thoracoscopy. It is recommended for guiding all invasive pleural techniques, and if possible should be performed immediately before the technique, avoiding puncture at the previously marked entry point.<sup>2</sup>

However, the role of thoracic ultrasound is complementary, and CT is the primary imaging modality for diagnosis. In the thoracic study for diagnosis and disease extension, we should include the abdomen, or at least the upper abdomen to assess any possible extension due to contiguity (since this is more frequent than distant extension) and peridiaphragmatic or, less frequently, retroperitoneal lymphatic involvement.

Despite the primary importance of CT in the extension study, other imaging modalities such as MRI and PET can provide valuable information on tumor invasion into adjacent structures and disease spread (including hidden distant metastases), respectively. This provides additional information for treatment planning and patient prognosis.<sup>3</sup>



Fig. 1. Ultrasound image of pleural effusion and pleural thickening.

## References

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