## CLINICAL IMAGES

## Thoracic endometriosis

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44-year-old woman presented to hospital with a 10-day history of hemoptysis. Her medical history included endometriosis and an ovarian cystectomy six years previously. Her hemoptysis coincided with her current menstrual period. She had no history of weight or appetite change, and was a nonsmoker. She was afebrile, with a normal blood leukocyte count. Chest radiography showed two nodules in the right lower lobe (Figure 1), and computed tomography of the chest showed multiple cavitary nodules bilaterally with a left-sided pneumothorax (Appendix 1, available at www.cmaj.ca/lookup/suppl /doi:10.1503/cmaj.100804/-/DC1). Although it is rare, we suspected thoracic endometriosis based on the patient's history and clinical presentation, but we could not exclude malignancy or granulomatous disease. We decided to proceed with video-assisted thoracoscopic surgery (VATS) to obtain tissue for pathologic

Figure 1: Chest radiograph (cropped) of a 44-year-old woman with hemoptysis showing two nodules (arrows) over the right lung.

examination. We removed a nodule from the left lung, and pathologic examination showed abundant endometrial glands and stroma (Appendix 2, available at www.cmaj.ca /lookup/suppl/doi:10.1503/cmaj.100804/-/DC1), consistent with thoracic endometriosis. The patient declined hormonal therapy because of concerns about long-term adverse effects. Three months later, we resected several nodules from her right lung. The patient's postoperative course was uneventful, and she remained free of hemoptysis during five months of follow-up.

Thoracic endometriosis may involve the trachea, bronchi, lung parenchyma, pleura or diaphragm. The presentation typically includes pneumothorax, hemoptysis, a lung mass or a combination of the above. Most instances occur in the third and fourth decades of life, and the right hemithorax is more often affected than the left side. Chest radiography is often normal but may show solitary or multiple pulmonary nodules, which change in size during the menstrual cycle. Computed tomography is more sensitive than plain radiography for diagnosis of pulmonary endometriosis.2 The treatment of pulmonary endometriosis may be medical or surgical. Although medical treatment involving gonadotropin-releasing hormone agonists has been recommended as the first line in treatment of extrapelvic endometriosis,3 preliminary evidence based on small case series suggests that lung resection using VATS for periodic hemoptysis occurring at the time of menstruation can also be effective.4,5

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