# Endometriosis of the Lungs Causing Recurrent Pneumothoraces in Pregnancy

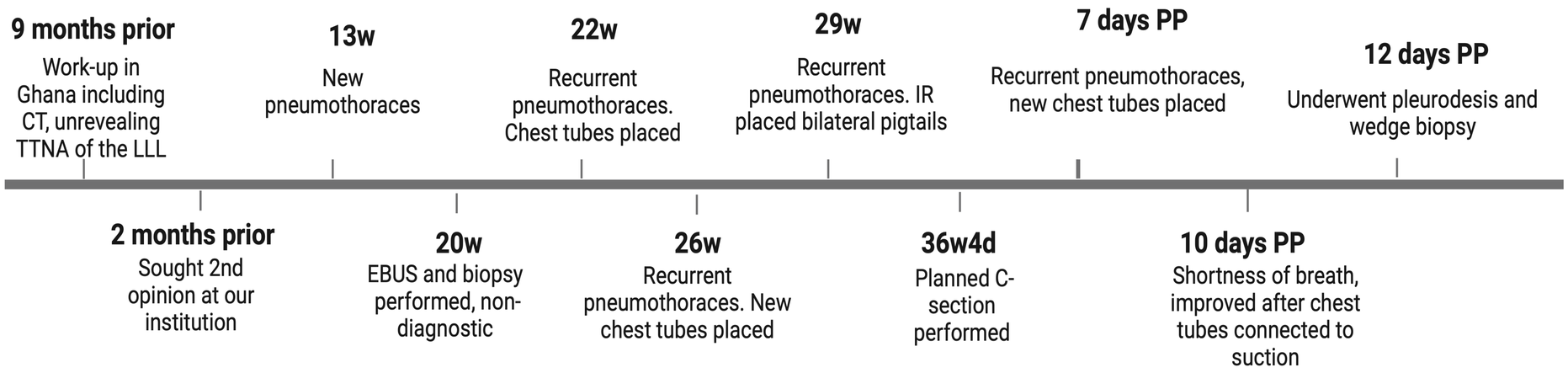
Katelyn Scharf MD, Shobana Bharadwaj MBBS, Jessica Galey MD, Autumn LaRocque MD, Bhavani Kodali MBBs; MD
Department of Anesthesiology, University of Maryland School of Medicine, Baltimore, MD

## Introduction

- Thoracic endometriosis is the presence of endometrial tissue in the diaphragm, pleura, or lungs
- Though rare, it is the most common form of endometriosis outside of the pelvis
- Affects women of reproductive age
- Thought to be caused by endometrial tissue traveling through diaphragmatic defects or via microembolization in pelvic veins
- Often will manifest as pneumothoraces

## Clinical Presentation

37-year-old woman from Ghana with a PMHx of uterine fibroids s/p myomectomy presented for progressive fatigue, shortness of breath, and bilateral pneumothoraces. Initial work-up, including transthoracic needle aspiration of a nodule in her left lower lobe was non-diagnostic. She presented to our institution for a second opinion.

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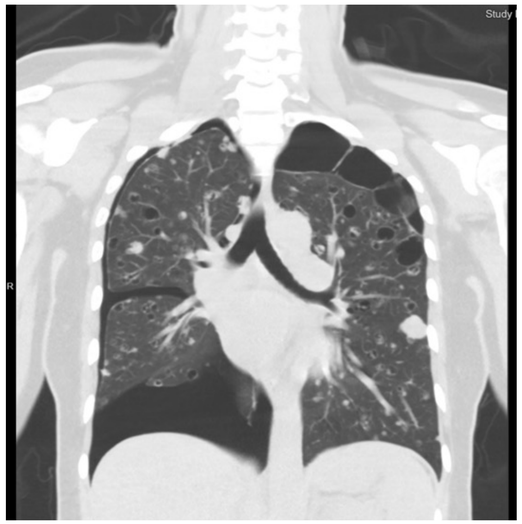
## Imaging



CT chest without contrast revealed a moderate-sized septated right-sided pneumothorax, numerous pulmonary nodules, masses, and cystic lesions distributed throughout all 5-lobes.

## Delivery Planning

- Recommended for primary cesarean delivery (CD) given risk of pneumothorax with Valsalva maneuver
- Underwent uncomplicated CD at 36w4d
- During CD, indwelling chest tubes were placed to suction
- CSE was performed without respiratory issues
- Fetus was delivered vertex via Kiwi vacuum assistance to avoid fundal pressure and potential popping of a pulmonary bleb
- 24-hour postpartum monitoring

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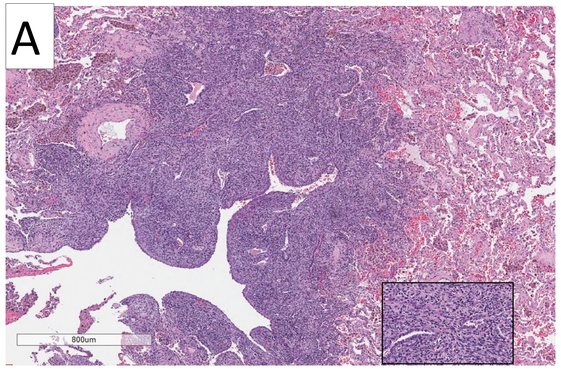
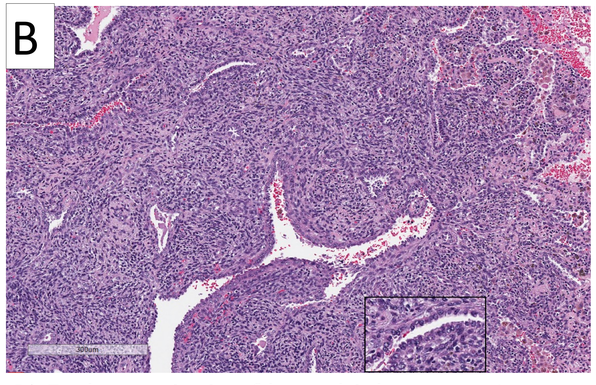
## Postpartum

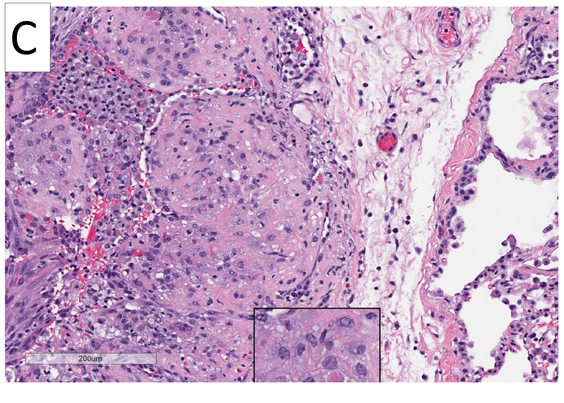
- Underwent video-assisted thoracic surgery (VATS) for pleurodesis and wedge biopsy, which confirmed endometriosis of the lungs
- Patient returned to Ghana 2-months postpartum and was lost to follow up




A) Endometriosis of lung, low power: Lung biopsy with endometrial stroma and endometrial glands (center) adjacent to lung parenchyma (periphery), consistent with endometriosis. Inset: high power view of endometrial gland.




B) Endometriosis of lung, high power: Lung biopsy with endometrial stroma and endometrial glands, consistent with endometriosis. Inset: high power view of endometrial gland.




C) Decidualization: lung biopsy with areas of endometrial decidualization, consistent with endometriosis in a pregnant patient. Inset: high power view of decidualized cells.

## Discussion

- Multidisciplinary approach that involved MFM, pulmonology, thoracic surgery, and OB anesthesia
- The avoidance of fundal pressure during the C-section helped prevent development of an additional pneumothorax

## References

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