An uncommon case of hydropneumothorax and haemoptysis

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DESCRIPTION

A 37-year-old woman presented to the chest clinic with catamenial bilateral lower chest pain, minor haemoptysis and epistaxis. She had a longstanding history of endometriosis, including previous resection of an umbilical deposit. She had been taking progesterone tablets until a few months prior to the presentation.

The chest radiograph showed a left-sided hydropneumothorax. A CT scan showed bilateral hydropneumothoraces, larger on the left, with bilateral pleural endometrial deposits (figure 1A), including a large deposit on the right hemidiaphragm (figure 1B). Pulmonary endometrial deposits can be seen as well-demarcated subpleural ovoid masses or

ground glass opacities, changing in size during the menstrual cycle.¹ The effusion was aspirated revealing a heavily blood stained exudate with no microbiological growth and no malignant cells on cytological examination. A T-spot test was negative.

The diagnosis of thoracic endometriosis syndrome is based on clinical features (chest pain, dyspnoea and haemoptysis) associated with menstruation and radiological findings of pneumothorax, pleural effusion, nodules, thin-walled cavities and bullae.² The haemopneumothorax resolved within 3 months without treatment as she was keen on having another child.

This is an unusual case of thoracic endometriosis, as all other reported cases have involved either pneumothorax, haemothorax or haemoptysis separately but not together.² It highlights the need to consider thoracic endometriosis syndrome in women of childbearing age who present with cyclical chest symptoms and signs, especially if they already have a diagnosis of endometriosis.

Figure 1 (A) Axial CT image showing a left-sided hydropneumothorax (pleural effusion marked A, air marked B and pleural endometrial deposits anteriorly marked C). (B) Coronal CT image showing bilateral pleural effusions (marked A) and two large deposits of endometrial tissue on the right hemidiaphragm (marked B).

Learning points

- ▶ Endometriosis affects 5–15% of women of childbearing age,³ however, despite the chest being the most common extrapelvic site for endometrial deposits, thoracic endometriosis syndrome is rare.²
- ▶ The exact pathogenesis of thoracic endometriosis is unclear; retrograde menstruation with transfer of endometrial tissue across the diaphragm is a postulated theory.²
- ▶ Treatment options include oral contraceptives, gonadotropin-releasing hormone analogues or resection of the ovaries. Thoracic surgical modalities, for example thorascopic pleurodesis, can be used if the woman wants to become pregnant, however recurrence is common, especially if multiple endometrial deposits are present.²

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