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► Additional supplemental material is published online only. To view, please visit the journal online (<http://dx.doi.org/10.1136/thorax-2023-220828>).

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Received 10 August 2023

Accepted 24 November 2023

Published Online First

5 January 2024



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To cite: Rostock L, Holotiuik O, Ploenes T. *Thorax* 2024;**79**:380–381.

Well-differentiated papillary mesothelial tumour: a rare finding on the pleura

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A 72-year-old woman presented to the emergency department with a history of non-specific intermittent abdominal pain. The patient experienced two episodes of diffuse continuous pain a few hours apart. Pain occurred in all four quadrants, and she felt constriction in the umbilical region. The first episode lasted approximately 2 hours. The second episode lasted more than 6 hours. Thereafter, the patient presented to the emergency department and reported no other symptoms, such as nausea, and normal bowel movements during the morning. The patient reported a medical history of bronchial asthma and arterial hypertension, both of which were well controlled with medication, and gynaecologic abdominal surgery for myoma decades previously. Additionally, she had a medical history of erosive gastritis and ulcer decades before. In 1975, she quit smoking. Before quitting, however, she smoked two cigarettes per day for 6 years. She reported no exposure to asbestos. She did not have a family history of any disease or malignancy.

The workup results revealed no pathology in the abdomen; however, a finding unrelated to the symptoms was observed in the thorax (figure 1). We performed a thoracoscopic evaluation and found a pedunculated tumour of the diaphragmatic pleura (figure 2). The remaining parietal pleura and visceral pleura were macroscopically unaltered. The tumour was resected and the postoperative course was uneventful. The histopathological examination revealed a well-differentiated papillary mesothelial tumour (positive immunohistochemistry staining for Wilms tumour gene 1, calretinin, cytokeratin 5/6, cytokeratins 7 and 8; negative

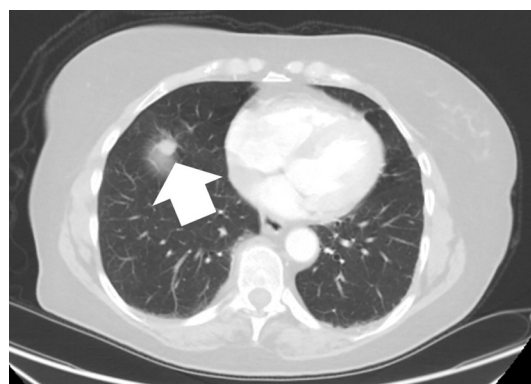


Figure 1 Radiological findings. The initial CT examination of the abdomen shows no pathologic findings; however, a mass appears near the diaphragm (white arrow).

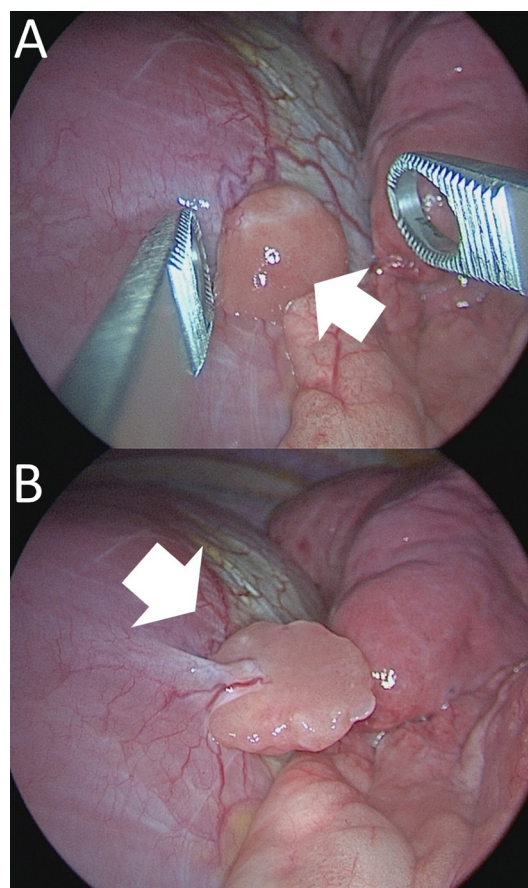


Figure 2 Intraoperative findings. (A) Initial view of the tumour located on the diaphragm. The instrument serves as a comparison for size. (B) After mobilisation, the back of the tumour with its pedicle is visible (white arrow).

immunohistochemistry staining for cytokeratin 20 and thyroid transcription factor 1) (online supplemental figure 1).

In 2022, well-differentiated papillary mesothelioma was renamed well-differentiated papillary tumour because of its relatively indolent behaviour and to avoid confusion with diffuse mesothelioma.¹ A well-differentiated papillary mesothelioma tumour of the pleura is extremely rare, and there are only a few case reports available in the literature; therefore, its incidence is not precisely known.² Most cases lack deep invasion and are associated with an indolent clinical course and long survival. The treatment of well-differentiated papillary mesothelioma mainly comprises surgery. There is no evidence of the benefits of chemotherapy and/or radiotherapy. Although recurrence is rare, further surveillance is recommended.³



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Contributors LR and TP wrote the paper. TP supervised the work. OH performed the immunohistochemistry and took the pictures. LR has explained and administered the form for the consent to the patient.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Consent obtained directly from patient(s).

Provenance and peer review Not commissioned; externally peer reviewed.

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