

Pulmonary tumour thrombotic microangiopathy: an important consideration for patients with a history of breast cancer- Owain Thomas- Warwick Hospital

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We report the case of a 56 year old, previously fit and well lady who presented with a three week history of progressive shortness of breath. She had previously received treatment for breast cancer in 2013 and routine surveillance had not shown any evidence of disease recurrence. A pulmonary embolism was suspected on admission, though CTPA was negative. The report made note of an enlarged and irregular liver of uncertain aetiology. These findings were discussed with hepatology and radiology teams who felt it did not signify malignancy. The patient's oxygen requirements continued to rise and transthoracic echocardiography showed marked right heart dilatation with significant pulmonary hypertension. A CA 15-3 blood test was elevated at 8677, raising suspicion of breast cancer recurrence with extensive pulmonary involvement. The patient continued to deteriorate and passed away

six days after admission. A hospital post-mortem did not show tumour recurrence in the breast tissue or chest wall. Histological examination of the liver showed extensive areas of poorly preserved tumour infiltrate and necrosis, whilst analysis of lung tissue revealed discohesive cells within small pulmonary vessels. The findings of the post-mortem are consistent with a diagnosis of pulmonary tumour thrombotic microangiopathy (PTTM). This illustrates a rare presentation of PTTM, which is difficult to diagnose, treat and is time critical, with post mortem results that do not show recurrence of tumour in local tissue. Despite its rarity, PTTM should be considered in patients who present with acute shortness of breath on a background of previous breast cancer.