Phyllodes tumour arising in the ectopic axillary breast tissue, mimicking axillary lymphadenopathy

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DESCRIPTION

A 46-year-old woman came to our hospital with a right axillary mass. She had no significant medical or family history of cancer. There were no abnormal findings in the bilateral breasts on palpation, mammography or ultrasound (US), but a hard, elastic mass of approximately 20 mm was palpated in the right axilla. US showed an oval, well-circumscribed hypoechoic mass with a major axis of 25 mm in the right axilla, suggesting right axillary lymphadenopathy (figure 1A). A contrast-enhanced CT whole-body scan revealed a well-defined mass on the right axilla near the medial upper arm. However, there were no other abnormal findings in the lymph nodes in the right axillary region or any other sites (figure 1B). There was also no evidence of primary malignancy in the breasts or other organs. She underwent US-guided core needle biopsy and was diagnosed with a fibroepithelial tumour, which suggested a fibroadenoma or phyllodes tumour. A tumourectomy was performed based on patient preference. The postoperative pathological findings confirmed that the tumour was a benign phyllodes tumour (figure 2A–C). Epithelial and stromal growth showing leaf-like architecture was observed. Ectopic breast tissue (EBT) was present around the tumour (figure 2B), suggesting that the tumour arose in the axillary EBT. EBT can be found at any point along the milk lines, which extend from the axilla

Figure 1 A well-circumscribed, oval hypoechoic mass with a major axis of 25 mm was observed in the right axilla on ultrasound (A). Contrast-enhanced CT scan revealed a mass with a well-defined contrast effect on the right axilla near the upper arm (white arrow) (B).

Figure 2 Macroscopic findings of the resected specimen (A). Histological findings from the surgical specimen (B, C). Ectopic breast tissue was present around the tumour (white arrow). The epithelial and stromal growth revealed a leaf-like architecture (haematoxylin and eosin staining).

to the inguinal area.^{1,2} Axillary EBT is present in 2%–6% of women.² In contrast, phyllodes tumours account for less than 1% of all breast tumours,³ and only a few cases have been reported.^{1,2,4–6} To the best of our knowledge, this is the first report of a CT image of a phyllodes tumour arising in the

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Images in...

axillary EBT. The CT image in this case is notable because it shows that tumours arising in the axillary EBT may present as lesions near the medial upper arm on CT, even if they appear as common axillary masses on US. Axillary lymphadenopathy is usually the primary consideration for a well-circumscribed mass in the axilla on US. However, tumours arising in axillary EBT should be considered as a differential diagnosis, particularly when the mass is present in an atypical axillary region on CT. To evaluate the precise anatomical location of a mass, it is important to make a comprehensive judgement from multiple modalities such as US and CT. A CT image may help to distinguish tumours arising in the axillary EBT from axillary lymphadenopathy.

Learning points

- Phyllodes tumours arising in the ectopic axillary breast tissue are extremely rare and can mimic lymphadenopathy on imaging.
- A CT image may help to distinguish tumours arising in the ectopic axillary breast tissue from axillary lymphadenopathy as the former can present as lesions near the medial upper arm.

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