

A rare case of cutaneous apocrine adenocarcinoma on the axilla that metastasized to the cervical lymph node 12 years after surgery

Dear Editor,

Apocrine adenocarcinoma is a rare malignant neoplasm arising mostly in apocrine-dense regions, such as the axilla and genital areas.^{1,2} Local recurrence and locoregional nodal metastasis are often observed, and most patients relapse at regional lymph nodes within 5 years.³ Here, we report a very rare case of apocrine adenocarcinoma that metastasized to the lymph node more than 10 years after surgery.

A 44-year-old Japanese woman presented with a 5 year history of a subcutaneous tumor on the right axilla. On physical examination, a 2.5 × 7.5 cm-sized, skin-colored, tender tumor was observed on the right axilla (Figure 1A). Histopathological findings from the biopsied specimen were suggestive of apocrine adenocarcinoma. Computed tomography (CT) analysis revealed axillary lymphadenopathy. No

other abnormalities were detected using thoracoabdominal CT, mammography, and endoscopy analysis. The patient underwent surgical resection with a margin of 2 cm and right axillary lymph node dissection. Postoperative histopathological findings showed tumor cells in the dermis and subcutaneous tissue (Figure 1B). The tumor cells contained eosinophilic cytoplasm, enlarged nuclei with prominent nucleoli (Figure 1C), and periodic acid-Schiff-positive cytoplasmic granules. Immature luminal structures were also observed (Figure 1C). By immunohistochemical analysis, the expression of gross cystic disease fluid protein-15 was observed in the tumor cells (Figure 1D). The tumor cells were negative for estrogen receptors, progesterone receptors, and Her-2 receptors. Histopathological findings of lymph node metastasis were also observed. The definitive diagnosis of apocrine adenocarcinoma with axillary lymph node

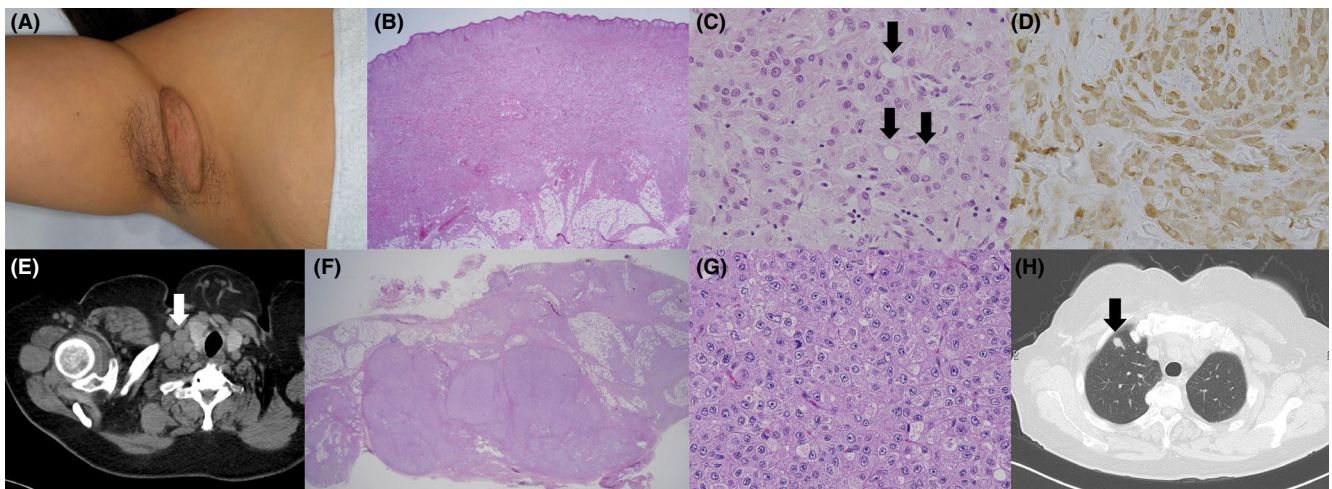


FIGURE 1 A, A subcutaneous tumor on the right axilla. B, Histopathology showing tumor cells in the dermis and subcutaneous tissue (H&E staining, ×12.5). C, Histopathology showing the tumor cells containing eosinophilic cytoplasm and enlarged nuclei with prominent nucleoli, and immature luminal structures (arrows) (H&E staining, ×400). D, By immunohistochemistry, tumor cells were positive for gross cystic disease fluid protein-15 (×400). E, CT scan showing the enlargement of the right cervical lymph node. F, Lymph node biopsy was performed (H&E staining, ×12.5). G, Histopathology showing the findings of lymph node metastasis (H&E staining, ×400). H, CT scan showing multiple metastases in the lung. H&E, hematoxylin and eosin; CT, computed tomography

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metastasis was made, and radiation therapy (total dose: 50 Gy) and three courses of chemotherapy (epirubicin, mitomycin C, vincristine, carboplatin, and fluorouracil) were administered. After these therapies, the patient was in a good general condition. However, regular follow-up CT revealed right cervical lymphadenopathy 12 years after the surgery (Figure 1E). Lymph node biopsy was performed, and the findings of lymph node metastasis were observed (Figure 1F,G). Although radiation therapy for cervical lymph node metastasis (total dose: 50 Gy) was administered, multiple metastatic lesions were observed in the lung 9 months later (Figure 1H). These lesions showed complete response after eight courses of weekly docetaxel. However, regular follow-up CT revealed multiple bone metastases 16 months after docetaxel therapy. She received radiation therapy to lumbar spine with 30 Gy, but did not want additional treatment.

For the treatment of apocrine adenocarcinoma, wide local excision with a clear margin of 1-2 cm has been recommended, and lymph node dissection should be performed for all cases with regional lymph node metastasis.^{1,2} The most important predictor of survival is the lymph node status with positive lymph nodes. However, no standard adjuvant chemotherapy or radiation therapy has been established.² Seo et al⁴ describe that the clinical course usually progresses slowly and can occasionally be associated with rapid progression. In our case, metastatic lesions were observed during the long-term follow-up period, and then, rapid progression was observed. Although most patients relapse at regional lymph nodes within 5 years,³ recurrence or metastasis could occur more than 10 years after surgery as is our case. Longer follow-up might be recommended.

APPROVAL OF THE RESEARCH PROTOCOL


No human participant was involved in this study.

INFORMED CONSENT

The patient has provided informed consent for the publication of the images submitted with this article.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

Soichiro Kado MD 
Koji Kamiya MD, PhD
Takeo Maekawa MD, PhD
Mayumi Komine MD, PhD
Satoru Murata MD, PhD
Mamitaro Ohtsuki MD, PhD

*Department of Dermatology, Jichi Medical University,
Shimotsuke, Japan*

Correspondence

Koji Kamiya, Department of Dermatology,
Jichi Medical University, 3311-1 Yakushiji, Shimotsuke City,
Tochigi 329-0498, Japan.
Email: m01023kk@jichi.ac.jp

ORCID

Soichiro Kado  <https://orcid.org/0000-0003-3039-8331>

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