Combination of Docetaxel and Gemcitabine Ineffective in Metastatic Eccrine Porocarcinoma: A Case Report

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Abstract
Malignant eccrine porocarcinoma is a very rare tumor and the etiology is not known. Treatment is surgical removal of the tumor. The benefit of chemotherapy and radiotherapy is unclear. A 49-year-old male patient presented with the complaint of left inguinal swelling. Ultrasonography examination revealed 5x4 cm inguinal lymphadenopathy. The inguinal lymph nodes were excised. Pathology report indicated eccrine porocarcinoma. The patient was treated with cisplatin 40 mg/m² week as well as concurrent radiotherapy for 5 weeks. After 6 weeks of dual therapy, liver metastases were detected. KRAS, NRAS, and BRAF tests were negative. Gemcitabine was administered at a dose of 1000 mg/m² on days 1 and 8 every 21 days, and docetaxel was administered at a dose of 75 mg/m² on day 8, every 21 days. There was progression after 2 cycles of chemotherapy. The patient lived 7 months. In this case, use of synchronous cisplatin and radiotherapy as adjuvant treatment could not prevent tumor metastasis. The combination chemotherapy of docetaxel and gemcitabine applied after metastatic disease development was ineffective.

Keywords: Adjuvant cisplatin, BRAF, docetaxel, eccrine porocarcinoma, gemcitabine, KRAS, NRAS


Case Report
A 49-year-old male patient presented with the complaint of left inguinal swelling. Inguinal lymphadenopathy of 5x4 cm was detected on ultrasonography examination. Fine needle aspiration biopsy sample of lymph node was reported as malignant. F-18 fluorodeoxyglucose (FDG) uptake in the left inguinal mass (standardized uptake value [SUV] maximum 8:18) was observed on positron emission tomography/computed tomography (PET/CT) image (Figure 1).
The inguinal lymph nodes were excised. Pathology result indicated porocarcinoma with Ki 67 proliferation index of 90% (Figure 2).

The patient was treated with cisplatin 40 mg/m² weekly as well as radiotherapy for 5 weeks. After 6 weeks of simultaneous chemo-radiotherapy, FDG uptake (SUV max 16.11) was detected in largest mass (6 cm) in the liver on PET/CT image (Figure 3).

KRAS, NRAS, and BRAF tests were conducted on the primary tumor for possible targeted treatment. All 3 tests had negative result. Gemcitabine was administered at a dose of 1000 mg/m² on days 1 and 8, every 21 days, and docetaxel was given at a dose of 75 mg/m² on day 8, 21 every days. Progression was detected after 2 cycles of chemotherapy. The patient lived for 7 months; metastasis developed at the fifth month after diagnosis, and the patient died 2 months after the development of metastasis.

There is no proven effective standard therapy for eccrine porocarcinoma. It has been reported that use of methotrexate or docetaxel as a single agent can be effective in the control of the disease.[9–11]

Pathological prognostic indicators of poor outcome include high mitotic index, lymphovascular invasion, and tumor size.[12] In the present case, the Ki-67 proliferation index was 90%. The KRAS, NRAS, and BRAF tests for targeted treatment were negative.

In this case, synchronous application of cisplatin and radiotherapy as adjuvant treatment could not prevent tumor metastasis and combination chemotherapy of docetaxel and gemcitabine administered after metastatic disease development was ineffective. Targeted therapies and genetic studies of this disease are needed.

Disclosures
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References
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case combining features of eccrine poroma and Paget’s dermatoisis. Arch Dermatol 1963;88:597–606. [CrossRef]