

# Treatment option of advanced of vulvar carcinoma with cisplatin, 5-FU, and TS-1

Yuka Inamura, Shinya Kitamura, Keisuke Imafuku, Hiroo Hata, Hiroshi Shimizu

Department of Dermatology, Hokkaido University, Graduate School of Medicine, Sapporo, Japan

**Corresponding author:** Dr. Shinya Kitamura, M.D., E-mail: keiba1081@yahoo.co.jp

Sir,

The incidence of vulvar squamous cell carcinoma (SCC) has been increasing, [1,2] and remarkable progress has been made in the surgical management of resectable vulvar SCC to the date [3-5]. These modifications in surgical management have maintained oncologic outcomes while significantly reducing morbidity. However, there has been no improvement in survival for those diagnosed with advanced or recurrent disease to the date. Some chemotherapy regimens have been used for treating advanced cutaneous vulvar SCC today; there is unfortunately no current standard treatment. Herein we describe a case of vulvar SCC with lung metastasis that had treated and kept stable disease (SD) with chemotherapy by cisplatin and 5-fluorouracil (high dose FP), and TS-1 as the additional chemotherapy after surgical treatment.

A 67-year-old Japanese woman referred to our hospital complaining of a reddish nodule on her vulva with four months history. Physical examination revealed a reddish nodule measuring approximately 20 x 20 x 8 mm on the right labia minora (Fig. 1a). A biopsy specimen from the nodule showed typical findings of SCC (Figs. 1b and c). Computed tomography (CT) scan showed no evidence of metastasis to the other organs. The tumor was completely excised by using the butterfly excision and both inguinal region lymphadenectomy. One year after the primary operation, CT scan showed multiple pulmonary nodules and they were diagnosed as multiple pulmonary metastases (Figs 2a and c). The treatment with cis-diamminedichloroplatin (cisplatin) and 5-fluorouracil (5-FU) (high dose FP; cisplatin 80 mg/m<sup>2</sup>, 5-FU 800mg/m<sup>2</sup>) was started.

After 6 cycles of administration, the lung metastases did not show any change in size or number, and the condition of lung lesions were evaluated for SD. 2 cycles of treatment with TS-1 as the additional chemotherapy were done after 6 cycles of high dose FP. She had been examined by CT scan every 3 months, and her disease was kept for SD more than one year after the treatment (Figs 2b and d). There were no serious side effects throughout the chemotherapy.

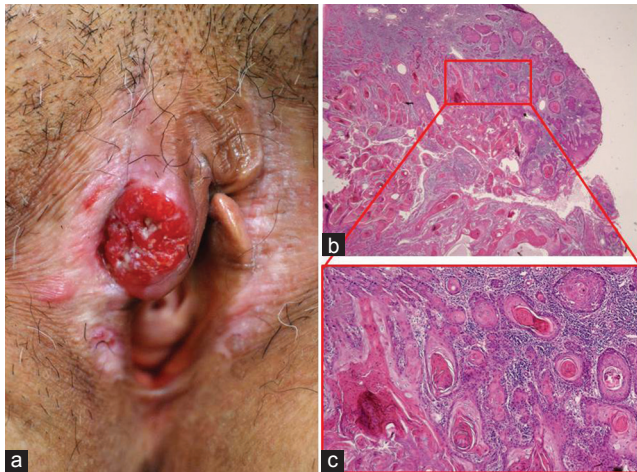
Vulvar SCC is extremely rare, which is account for only about 2% of malignant neoplasm of the female genital tract and 3.3% of all SCCs. As the background vulvar dystrophy and lichen sclerosis are known to be as pre-existing phenomena in some patients [6]. Owing to the low incidence, randomized trials have not been carried out and current therapeutic strategies have been based on retrospective studies. The role of surgery has been done at the initial stages. At the early stage, single external beam radiotherapy or even brachytherapy has achieved excellent results in improving 5-year survival rate. However, 5-year survival rate in advanced cases are still poor, being 52.2% for patients with stage 2, 42.5% for patients with stage 3, and 20.5% for patients with stage 4A disease [7]. Only a few previous studies of concurrent chemoradiation therapy for primary SCC of the vagina have been reported, but the conclusions from these studies were limited by their small numbers [8]. Only one prospective study evaluating the use of single chemotherapy in the adjuvant setting was published by Bellati [9]. Consisting of single chemotherapy, radiation, or both of them, has been recommended.

In our presenting case, the patient had treated with high dose FP and TS-1 as the additional chemotherapy after surgical treatment without radiation therapy, and

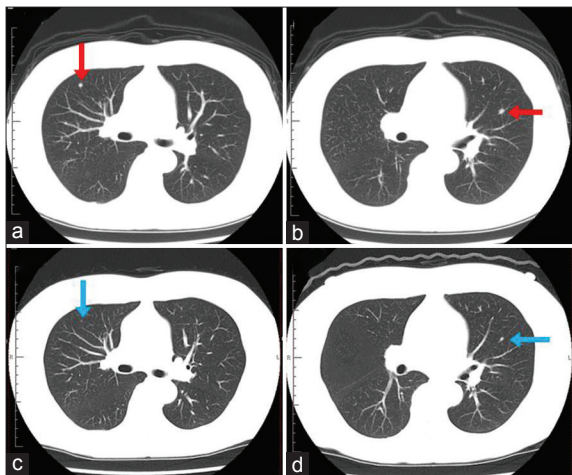
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**Figure 1:** Clinical and histopathological findings. (a) A reddish nodule is observed on the right side of labia minor, (b,c) Histopathology findings showed atypical squamoproliferative lesion composed of atypical, keratinizing tumor islands and infiltrating strands with moderate- to high-grade nuclear atypical and mitotic figures, consistent with squamous cell carcinoma. (Hematoxylin and eosin staining, original magnification x40 (b), x100 (c)).



**Figure 2:** Computed tomography scan imaging. (a) (b) There are multiple pulmonary nodules in her lung one year after the primary operation, (c) (d) Multiple pulmonary nodules are kept for SD more than one year after finishing chemotherapy.

her condition has been kept for SD for three years up to the present.

In conclusion, the regimen of combination with high dose FP and TS-1 might be new treatment option for advanced vulvar SCC.

### Consent

The examination of the patient was conducted according to the Declaration of Helsinki principles.

### REFERENCES

1. Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, et al. SEER Cancer Statistics Review, 1975-2009. 2011 Nov [cited 2012 April].
2. Ramanah R, Lesieur B, Ballester M, Darai E, Rouzier R. Trends in treatment and survival of late-stage squamous cell vulvar carcinomas: analysis of the surveillance, epidemiology, and end results (SEER) database. *Int J Gynecol Cancer*. 2012;22:854-9.
3. Moore DH. Principles and practice of gynecologic oncology, 6<sup>th</sup> ed. Baltimore: Lippincott Williams & Wilkins, 2009.
4. Hacker NF, Leuchter RS, Berek JS, Castaldo TW, Lagasse LD. Radical vulvectomy and bilateral inguinal lymphadenectomy through separate groin incisions. *Obstet Gynecol*. 1981;58:574-9.
5. Van der Zee AG, Oonk MH, De Hullu JA, Ansink AC, Vergote I, Verheijen RH, et al. Sentinel node dissection is safe in the treatment of early-stage vulvar cancer. *J Clin Oncol*. 2008;26:884-9.
6. Parkin DM, Bray F, Ferlay J, Pisani P. Global cancer statistics, 2002. *CA Cancer J Clin*. 2005;55:74-108.
7. Kim JY, Lee KA, Kim BG, Bae DS, Lee JW. Vaginal cancer with multiple liver and pulmonary metastases that achieved long-term survival. *Obstet Gynecol Sci*. 2013;56:416-9.
8. Reade CJ, Eiriksson LR, Mackay H. Systemic therapy in squamous cell carcinoma of the vulva: Current status and future directions. *Gynecol Oncol*. 2014;132:780-9.
9. Bellati F, Angioli R, Mancini N, Angelo Zullo M, Muzii L, Plotti F, et al. Single agent cisplatin chemotherapy in surgically resected vulvar cancer patients with multiple inguinal lymph node metastases. *Gynecol Oncol*. 2005;96:227-31.

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