

## Cutaneous Metastasis of Postpartum Choriocarcinoma: Case Report

Choriocarcinoma is one of the malignant tumors arising from trophoblastic cells and characterized by the secretion of human chorionic gonadotropin (HCG). The tumor consists of two basic cell types: cytotrophoblast and HCG-positive syncytiotrophoblast (1). Choriocarcinoma commonly metastasizes to the lungs and vagina and less commonly to the liver, brain, kidneys and gastrointestinal tract (2). Skin is a rare site for metastatic choriocarcinoma (3,4), with 11 cases of cutaneous metastatic choriocarcinoma reported in the literature until 2007 (5). We describe a case of a 47-year-old Iranian female patient gravid 4, para 3, abortion 1, with cutaneous metastasis of choriocarcinoma, diagnosed from skin biopsy.

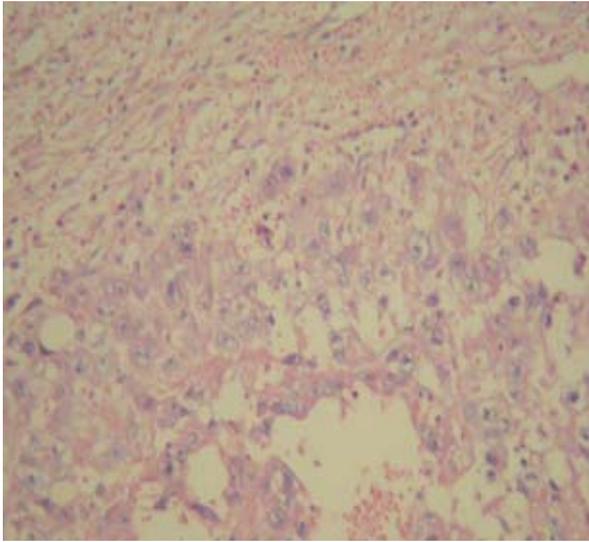
The patient presented to our hospital with dyspnea and cough of 4-month duration and a cutaneous nodule of 1-month duration on the right side of her upper back. The patient had abortion 1 year before, when histology of the material obtained by uterine curettage showed a choriocarcinoma, which was treated with chemotherapy. Three months before presentation, chest computed tomography scan revealed 4 metastatic pulmonary nodules variable in size and positive for beta HCG.

Her cutaneous lesion was a raised infiltrated peripheral violaceous and centrally darkened erythematous rubbery hard nodule, 2 cm in diameter, with ragged surface (Fig. 1). Subjective symptoms such as pruritus or tenderness were not present. There was no significant finding on physical examination. Excisional biopsy of the skin lesion showed an anaplastic malignant tumor that had infiltrated to the dermis and hypodermis, with extensive hemorrhage and necrosis and sheets of viable mononuclear tumoral cells with large vesicular nuclei and conspicuous nucleoli (trophoblasts). Additionally, there were some multinucleated tumoral cells with abundant eosinophilic cytoplasm (syncytiotrophoblasts) (Fig. 2). Our case responded well to combination chemotherapy. Her pulmonary symptoms almost disappeared with a significant decrease of serum HCG.

Choriocarcinoma, in women, occurs often after gravid state such as hydatidiform mole, abortion and normal term pregnancy. It rarely derives from germ cells in the ovary and in men; it commonly arises from germ cells in the testis (1). The most common metastatic sites for choriocarcinoma are lung (60%-95%), vagina (40%-50%), vulva (10%-15%), brain and liver (10%), and kidney and spleen (<5%) (3). Compared to other organs, skin is an uncommon site of metastatic cancer in the body and is usually associated with a disseminated disease and poor prognosis (1). Eleven cases of cutaneous metastatic choriocarcinoma were reported in the literature until 2007 (5). The overall incidence of cutaneous metastases is within the range of 1.4%-4.4% (6,7). Gleizal *et al.* report on a case of nasal cutaneous metastasis where the patient died 14 months after the initial diagnosis (5). In their literature review of 11 patients with metastatic choriocarcinoma to the skin, seven patients were men and four were women. The primary site was unknown in six cases, particularly in women, and the lesion was singular in most cases (5). In comparison to the case



**Figure 1.** Metastatic cutaneous choriocarcinoma on the right upper back of a 47-year-old woman.



**Figure 2.** Involvement of the dermis and hypodermis by a malignant neoplastic tissue with extensive hemorrhage and necrosis and sheets of viable mononuclear tumoral cells with large vesicular nuclei and conspicuous nucleoli (trophoblasts) and some multinucleated tumoral cells with abundant eosinophilic cytoplasm (syncytiotrophoblasts). (HE; x100).

report by Chhieng *et al.* (3), cutaneous manifestation in our case was not the presenting sign and had developed after pulmonary symptoms. Chama *et al.* report on another case of choriocarcinoma with metastasis to the chest wall, which responded well to 12 cycles of combination chemotherapy (4).

Importantly, clinical examination is not specific for cutaneous metastases and the diagnosis can only be made by histology. Notably, skin metastases have typical histologic features of choriocarcinoma with a biphasic cellular pattern containing both syncytiotrophoblastic and cytotrophoblastic elements (5).

Accordingly, we describe an extremely rare case of postpartum metastatic cutaneous choriocarcinoma after pulmonary metastasis in an Iranian patient diagnosed by typical histologic findings of a cutaneous metastatic lesion.

### References

1. Park SG, Chang JY, Kim SH, Bang D. Cutaneous metastasis of choriocarcinoma: a case report. *J Korean Med Sci* 2005;20:683-6.
2. Copeland LJ. Gestational trophoblastic neoplasia. In: Copeland LJ, Jarrell JF, editors. *Textbook of Gynecology*. 2<sup>nd</sup> ed. Philadelphia: W.B. Saunders; 2000. pp. 1418-27.
3. Chhieng DC, Jennings TA, Slominski A, Mihm MC Jr. Choriocarcinoma presenting as a cutaneous metastasis. *J Cutan Pathol* 1995;22:374-7.
4. Chama CM, Nggada HA, Nuhu A. Cutaneous metastasis of gestational choriocarcinoma. *Int J Gynaecol Obstet* 2002;77:249-50.
5. Gleizal A, Torossian JM, Wan DC, Béziat JL. Testicular carcinoma presenting as cutaneous nasal metastasis: case report and review of the literature. *Br J Oral Maxillofac Surg* 2008;46:416-8.
6. Reingold IM. Cutaneous metastases from internal carcinoma. *Cancer* 1966;19:162-8.
7. Abrams HL, Spiro R, Goldstein N. Metastases in carcinoma: analysis of 1000 cases. *Cancer* 1950;3:74-85.

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