

## Skin Metastases to Cesarean Scar at Diagnosis of Carcinoma of Cervix in a Postpartum Female

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### Abstract

**Objective:** The authors describe the first report of a cesarean scar metastasis at time of diagnosis of cervical cancer in a postpartum female.

**Results:** We describe the case of a 23 year old multiparous female who is diagnosed with stage IVB cervical cancer 5 months after an emergent cesarean delivery for preterm premature rupture of membranes. At time of diagnosis, she presented with a large cutaneous metastasis at the site of her Pfannenstiel incision. She completed a course of radiation and chemotherapy, however opted for hospice when disease progression was noted after 6 cycles of cisplatin and paclitaxel.

**Conclusion:** The patient's disease was likely present at the time of her cesarean section. We recommend thorough pelvic exams in women who present late in pregnancy without prior prenatal care. Though cesarean section is thought to decrease the likelihood of cervical cancer recurrence, it does not completely obviate the risk.

**Keywords:** Cervical cancer; Pregnancy; Cutaneous metastasis; Cesarean section

### Background

Cutaneous metastases may be seen in approximately 2% of visceral tumors, more commonly in cancers of the breast, GI tract, lung and ovary [1]. They are known to have a wide variety of appearances, including nodular, plaque-like or teleangiectatic. Skin involvement is rare in cervical cancer and indicates an advanced disease stage. Most reported cases of cutaneous metastases have been diagnosed at time of recurrence several months (or years) after initial treatment. Skin involvement portends a poor prognosis; death usually follows within 3-6 months [2]. Here we report a case of cutaneous metastasis at time of diagnosis of cervical cancer in a young, postpartum Hispanic female.

### Case

Twenty three year old G4P3A1 who initially presented to the emergency department with complaints of fever, nausea & vomiting and lower abdominal pain for several months with concomitant 70 pound weight loss since the birth of her last child five months prior. She had presented to an outside hospital at approximately 27-28 weeks gestation with no prenatal care complaining of copious yellow vaginal discharge. She was diagnosed with preterm premature rupture of membranes for which she underwent an emergent cesarean section. Since that time she continued to have a significant amount of the same discharge. She also noted an enlarging mass at her incision about 1 month prior to presentation. Her last pap smear prior to presentation was one year ago and showed atypical cells of undetermined

significance, cannot rule out high grade (ASC-H), after which she was lost to follow up.

In the emergency room she was found to be febrile and tachycardic. On abdominal exam she had a three centimeter superficial, fluctuant and erythematous mass at the lateral border of her Pfannenstiel incision that was draining straw-colored fluid. A larger 5x7cm mass was palpated deep to the superficial mass. On pelvic exam, fungating cervical mass was noted with extension to bilateral pelvic sidewalls. CT scan revealed multiple cystic masses in the subcutaneous tissue of the abdomen with moderate left sided hydronephrosis. Lasix renogram revealed a non-functioning left kidney. Cervical biopsy revealed squamous cell carcinoma and aspiration of the mass in her low transverse incision confirmed metastasis to her skin.

The patient was staged as IVB squamous cell carcinoma of the cervix. Given her extensive symptomatic pelvic disease she was initially treated with palliative pelvic radiation therapy for a total of 5000 cGy delivered in 25 fractions over 50 days, without concurrent cisplatin because of a possible concomitant pelvic tuberculosis diagnosis which was being treated with isoniazid, rifampicin, pyrazinamide, and ethambutol. She had a positive PPD, fevers, and tachycardia. Ultimately, her AFB cultures were negative, and the antibiotics were discontinued. She tolerated pelvic radiation well and went on to receive systemic chemotherapy with cisplatin (50 mg/m<sup>2</sup>) and paclitaxel (135 mg/m<sup>2</sup>). She tolerated chemotherapy well and imaging after the first three cycles showed stable disease, however subsequent imaging after cycle six showed disease progression. She declined additional chemotherapy, and opted for supportive care with home hospice. She was on hospice for 8 months before dying of her disease.

## Discussion

Cervical cancer is the fourth most common female cancer worldwide with nearly 530,000 new cases and 266,000 deaths in 2012, more than 85% of which occur in less developed nations [3]. The exact incidence of cervical cancer in pregnancy is unknown, but one study has reported an incidence of 1.2 per 10,000 births [4]. This disease provides unique ethical dilemmas in regards to diagnosis, work up and treatment leading to a paucity of data allowing for management guidelines. Postpartum women diagnosed within 6 months of delivery appear to have worse survival outcomes than those diagnosed during pregnancy [5]. Sood et al. reported vaginal delivery as the most significant predictor of disease recurrence in multivariate analysis (odds ratio [OR] 6.91; 95% confidence interval [CI] 1.45-32.8) [5].

Cervical cancer is known to spread primarily by direct extension and through the lymphatics with common sites of distant metastases being lung, bone and liver [6]. Skin metastases have been reported rarely, usually remote from initial presentation and diagnosis. Most of the previously described metastases to skin incisions were recurrences after primary treatment with radical hysterectomy. In 1993, Imachi et al. reviewed a cohort of 1190 women with invasive cervical cancer and found the overall incidence of skin metastases to be ~1.3%; 0.8% in those with Stage I disease and 4.8% in Stage IV. In this study, metastases to skin incisions were excluded [7]. Those with adenocarcinoma were more likely to have cutaneous involvement compared with those with squamous cell carcinoma (5.8% vs. 0.9%). Overall prognosis is poor for these women; eleven of 15 patients died within 24 months of diagnosis of a skin metastasis [7]. Given this patient's advanced disease at diagnosis, we suspect that her cervical cancer was present at the time of her Cesarean section.

## Conclusion

This case represents the first report of cervical cancer initially presenting as skin metastasis to a low transverse incision performed at

the time of cesarean section. We recommend considering thorough pelvic exams at the time of delivery for patients who present with limited or no prenatal care. Ideally this would occur at time of presentation to Labor & Delivery in a setting with appropriate lighting and equipment for optimal evaluation. This may have led to an earlier diagnosis for this patient, though it is unclear whether her prognosis would have been altered. If cervical cancer is known to be present at time of Cesarean section, a classical uterine incision should be performed.

## References

1. Nashan D, Muller ML, Braun-Falco M, Reichenberger S, Szeimies RM, et al. (2009) Cutaneous metastases of visceral tumours: a review. *J Cancer Res Clin Oncol* 135: 1-14.
2. Braverman IM (2002) Skin manifestations of internal malignancy. *Clinics in geriatric medicine* 18: 1-19.
3. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, et al. (2015) Cancer incidence and mortality worldwide: Sources, methods and major patterns in GLOBOCAN 2012. *Int J Cancer* 136: E359-386.
4. Smith LH, Danielsen B, Allen ME, Cress R (2003) Cancer associated with obstetric delivery: results of linkage with the California cancer registry. *Am J Obstet Gynecol* 189: 1128-1135.
5. Sood AK, Sorosky JI, Mayr N, Anderson B, Buller RE, et al. (2000) Cervical cancer diagnosed shortly after pregnancy: prognostic variables and delivery routes. *Obstet Gynecol* 95: 832-838.
6. Berek JS, Hacker NF (2009) In: *Gynecologic Oncology*. (5th edn), Lippincott Williams & Wilkins, Philadelphia.
7. Imachi M, Tsukamoto N, Kinoshita S, Nakano H (1993) Skin metastasis from carcinoma of the uterine cervix. *Gynecol Oncol* 48: 349-354.