

## Abdominal Incision Metastasis from Squamous Cell Carcinoma Cervix after Wertheim's Hysterectomy-A Case Report and Review of Literature

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### ABSTRACT

Scar site recurrence is a rare phenomenon and is more uncommon in squamous cell carcinoma. We present a special case of scar site recurrence in a 40-year-old patient with carcinoma cervix detected on MRI abdomen and pelvis, 5 months after Wertheim's hysterectomy. The prognosis is bad in these patients, as they also present with distant organ metastasis.

**KEYWORDS:** recurrence, scar, incision, cervix, carcinoma

### ARTICLE DETAILS

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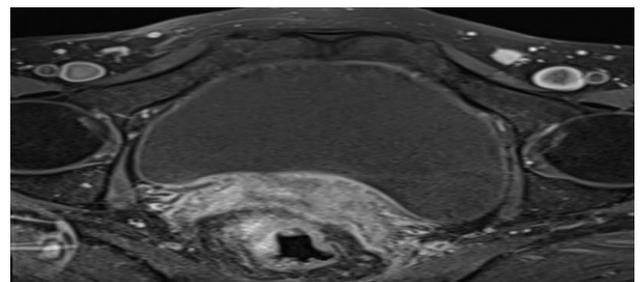
### BACKGROUND

The most common way that uterine cervical cancers relapse following surgery and radiation therapy is locoregionally. The most common sites for relapse are the vagina and the pelvis (parametrium or lymph nodes). Rarely, distant metastases are typically found in the liver, lungs, and bones [1]. The common primary sites of patients with skin metastases are the breast, large intestine, lung, and ovary. Incisional skin metastases from cervical cancer are exceedingly uncommon, with incidences ranging from 0.1% to 0.2% [2]. The present case is unusual because incisional skin metastasis was seen in squamous cell carcinoma cervix where patient did not receive any adjuvant treatment after Wertheim's hysterectomy and presented to us 5 months after surgery with lesions in the pelvis abutting the vault suggestive of recurrence and skin metastases.

### CASE REPORT

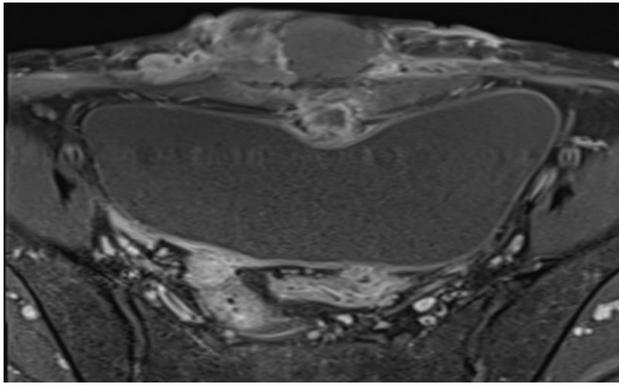
A 40-year-old female patient a known case of squamous cell carcinoma cervix, status post Wertheim's hysterectomy. Post operative histopathological examination showed Grade 2, non-keratinizing squamous cell carcinoma cervix, Lymphovascular invasion and tumour necrosis detected. TNM staging PT1B1NxMx. No adjuvant treatment was taken (Done outside) presented to our department with complaints of a multiple swellings in the scar site and lower abdominal pain since 1 month. On examination, multiple mobile lesions noted in the abdomen along the scar site approximately measuring 2x2cms, hard in consistency. On per speculum and vaginal examination, vault was normal. The vaginal walls were free. Bilateral parametrium was smooth and rectal mucosa, rectovaginal septum was supple. No palpable

inguinal and supraclavicular lymph nodes were noted. Biopsy from the scar site revealed tumor cells arranged in glandular pattern and in clusters having moderate amount of eosinophilic cytoplasm, hyperchromatic nuclei and many show intra nuclear inclusions. Brisk necrosis present mitotic activity with features suggestive of malignancy. MRI abdomen and pelvis showed lesions in the pelvis abutting the vault measuring 17 x 16 x 30 mm (AP x TR x CC) on right side and 22 x 19 x 27 mm (AP x TR x CC) on left side appearing hypointense on T1 and hyperintense on T2 showing heterogenous post contrast enhancement. The lesions show loss of fat planes with the mesorectal fascia posteriorly. The lesion on the right side shows suspicious loss of fat planes with the small bowel loop superiorly (**FIG1**) Multiple fairly well-defined T1w hypointense and T2w hyperintense heterogeneously enhancing lesions noted involving the anterior abdominal wall (intramuscular and subcutaneous planes) along the scar site, largest measuring 21 x 25 x 24 mm [Ap x TR x Cc] (**FIG 2**) The deeper lesion is seen closely abutting the urinary bladder with ill-defined fat planes. No evident pelvic or retroperitoneal nodes and no ascites.



**FIG 1. showing lesion in the pelvis abutting the vault suggestive of recurrence**

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**FIG 2. showing multiple lesions over the anterior abdominal wall.**

She was planned for palliative chemotherapy carboplatin (area under the curve, 5) and paclitaxel 175 mg/m<sup>2</sup> every 3 weeks for 6 cycles and she received the same. During the course of the treatment, she developed febrile neutropenia and she was treated for the same. She was doing well in the last follow up.

### DISCUSSION

Seventy to eighty percent of cervical cancers are squamous cell carcinomas. Cervical carcinoma recurrence rates vary from 30% to 60%. Recurrence risk is higher in patients with margin and node positivity, advanced stage, poorly differentiated tumor, lymphovascular space invasion, and deep stromal invasion. Within a year, 41% of recurrences take place. The best course of treatment for incisional cancer is still unknown due to its uncommon recurrence. The course of treatment is unique and contingent upon the stage of the illness and the existence of metastases [3].

Skin metastasis is a rare occurrence, with incidence rates of less than 5% [1]. There have been numerous reports of metastatic carcinoma in abdominal wall incisions associated with bladder, kidney, and colon cancers [2]. The question of the route of spread is raised by the presentation of a single metastasis at the site of the surgical incision. Up to 50% of solid malignant tumors recur locally following surgical resection with microscopically clear margins [4]. Skin metastases are most frequently associated with adenocarcinoma and undifferentiated carcinoma, though squamous cell carcinoma has also been known to cause them on occasion [5]. There has been no difference in the incidence of skin metastasis among the clinical stage [5]. Three common patterns (nodules, plaques, and inflammatory telangiectatic lesion) of skin metastasis have been seen macroscopically [6]. Anterior abdominal wall (especially at the drain site), vulva, and anterior chest wall are the most common site of skin metastasis in carcinoma cervix [5].

Both locally, at the site of tumor resection, and distantly, at the sites of surgical access to the body cavities or compartments, occult tumor cells and surgical wounds may interact. The likelihood that occult tumor cells will be present

in or near the local surgical wound made during tumor resection should be significantly higher than the likelihood that they will be present in distant wounds if the migration of tumor cells detached from the primary neoplasm is directed by positional information expressed within the developmentally defined morphogenetic unit. Recurrences following tumor resection with microscopically free margins (R0) can happen locally at the surgical resection site in as many as 50% of cases, but only 1-2% of cases are reported to occur in the distant surgical scar. [7]. Neoplastic cells receive various stimuli and experience conditions favouring the formation of a tumor relapse once exposed to the wound environment.

The majority of cases of skin metastases from cervical carcinoma are associated with tumor recurrences; metastases can develop up to 10 years after the initial diagnosis and typically do so within a year. Palliation through surgical procedures, chemotherapy, radiation therapy, either alone or in combination, is the goal of treatment for advanced recurrent disease. Chemotherapy based on cis-platinum has been proven to be an efficient treatment for symptom management.

According to a study, patients who had locally extended endopelvic resection for recurrent cervical carcinoma with a negative margin had a 62% 5-year survival rate [8].

The platinum-free interval of more than 2 years was defined as the cutoff point between platinum sensitivity and resistance in cervical cancer by Matoda et al [9]. In recurrent cervical cancer, Pectasides et al. evaluated the response to carboplatin and paclitaxel and found that the complete response rate was 16%, the median progression-free survival was 6 months, and the median overall survival was 13 months with an acceptable toxicity profile [10]. In addition, patients with scar recurrence at other sites in cervical carcinoma were also treated with cisplatin with 5-fluorouracil and doxorubicin, along with radiotherapy. Chemotherapy with paclitaxel, ifosfamide, and cisplatin was well tolerated in one study [11].

### CONCLUSION

Management strategy should be individualized depending on the extent of metastasis, resectability, and sensitivity to platinum-based chemotherapy once scar metastasis is identified. As long as post-irradiated cervical carcinoma is resectable, surgical excision is still the main treatment for scar site recurrence. Continued involvement in relevant clinical trials will lead to advancements in the treatment of cervical cancer and its recurrence in the future. The combination of carboplatin and paclitaxel seems to have importance in advanced or recurrent cervical carcinoma with an acceptable toxicity profile.

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