

Case Report

Retroperitoneal cystic metastasis from cervical cancer: a rare case report

Shruthikamal V., Reshma S.*, Akmal A.

Department of General Surgery, Saveetha Medical College, Chennai, Tamil Nadu, India

Received: 23 April 2017

Accepted: 23 May 2017

*Correspondence:

Dr. Reshma S.,

E-mail: surgeonreshma@gmail.com

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ABSTRACT

Cervical cancer accounts for 5% of all cases of cancer diagnosed worldwide. Cervical carcinoma commonly spreads via the lymphatics, with metastases first occurring in the pelvic lymph nodes, and then sequentially spreading to the paraortic nodes. Retroperitoneal cystic metastases originating from cervical cancer is extremely rare. In patients undergoing chemoradiation, isolated failure in the lymph nodes is uncommon and is more commonly associated with failure to control the primary tumor. Study report a case of 62 years old woman with retroperitoneal cystic metastasis from cervical cancer managed with cystojejunostomy along with Roux en y reconstruction and chemotherapy.

Keywords: Cervical cancer, Cystojejunostomy, Chemotherapy, Metastases, Retroperitoneum

INTRODUCTION

Globally, about 5,00,000 cases of cervical cancer are diagnosed per year, which accounts for 5% of all cases of cancer diagnosed worldwide. The majority of these cases (>80%) occur in developing countries.^{1,2} Direct invasion is the main method for the diffusion of cervical cancer, followed by lymphatic metastasis, whereas hematogenous diffusion rarely occurs.³ Hematogenous diffusion of tumor cell is a typical symptom of terminal cervical cancer. Common sites of such diffusion are the lungs, bones, aorta, and the celiac and supraclavicular lymph nodes, whereas retroperitoneal cystic metastasis are rare. Retroperitoneal neoplasms, defined as solid or cystic tumors that arise within the retroperitoneal space are rare and estimated to represent approximately 0.1% to 0.2% of all malignant tumors, where most frequent entities include lymphoproliferative tumors, soft tissue tumors and extragonadal germ cell tumors.⁴ Retroperitoneal cystic metastasis of squamous cell carcinoma from cervical carcinoma is extremely rare and little is known

about its etiology, pathogenesis, and optimal therapy. In this paper, we report a rare case of 62-year-old female with retroperitoneal cystic metastasis originating from cervical carcinoma.

CASE REPORT

In 2010, a 62-year old female who was diagnosed with cervical squamous-cell Carcinoma underwent full course radiotherapy. On 2013, she developed abdominal pain, nausea and vomiting, evaluated and computed tomography showed pseudocyst of pancreas with obstructive signs over the duodenum and underwent Gastrojejunostomy at outside hospital, cyst wall histopathological report revealed as inflammatory collection with no evidence of malignancy.

Patient was disease free for 1 year duration. On September 2016, patient came to our hospital with complaints of abdominal pain, nausea and vomiting for 2 years duration. Physical examination revealed an acutely

ill woman, with blood pressure of 110/70 mmHg (normal - 90/60-120/90/mmHg), pulse rate 84 beats / min (normal - 60-100 beats/min), temperature of 37.0°C (normal - 36.0-37.0°C). Findings included a vague fullness felt at the left lumbar region with healthy upper midline laparotomy scar present, tenderness in the left lumbar region. Laboratory studies revealed the following results: Red blood cell measured was 4.4×10^{12} cells/l (normal, $3.5-4.5 \times 10^{12}$ cells/l), hemoglobin of 11 g/dl (normal 11-15g/dl), CA 19-9 was done, which showed normal level of 23 μ /ml (normal range is $<30.90 \mu$ /ml). Upper GI scopy showed distended stomach with afferent and efferent loops of gastrojejunostomy noted. Contrast CT abdomen revealed irregularly peripherally enhancing lobulated septate shaggy walled retroperitoneal collection (Figure 1) with Grade III Hydroureteronephrosis left kidney and mildly bulky heterogeneously enhancing cervix.

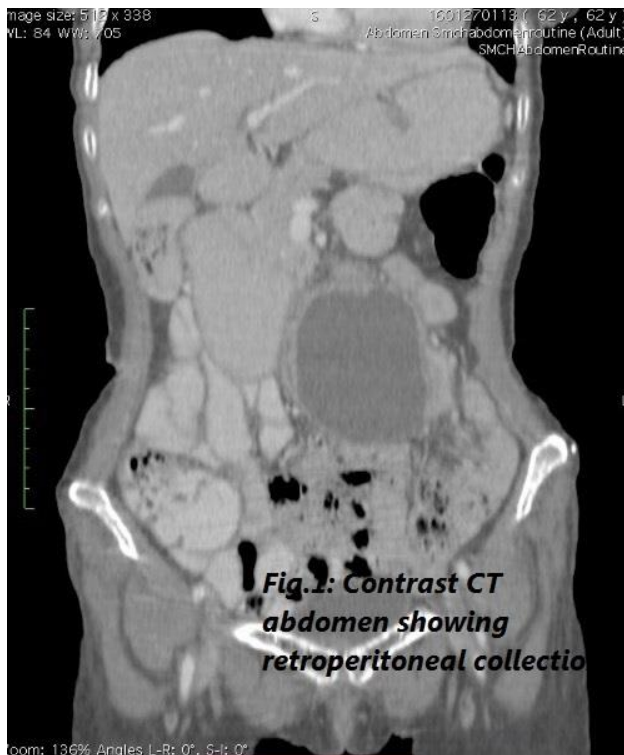


Figure 1: Contrast CT abdomen of retroperitoneal collection.

Subsequently, exploratory laparotomy was performed and a huge retroperitoneal cyst with thick wall was found causing pressure effect over the left ureter, duodenum and jejunum noted along with previous posterior gastrojejunostomy status. There was no Ascites and no peritoneal metastasis. Aspiration of the cyst done (Figure 2) and fluid sent for analysis, cyst wall opened and sent for histopathological examination. Then, cystojejunostomy along with roux en y reconstruction was done. Post-surgical analysis of cyst wall biopsy indicated metastatic Carcinomatous deposits of squamous cell Carcinoma. Fluid Analysis revealed no malignant cells, with few inflammatory cells. Thus, Pathological

examination confirmed a diagnosis of metastatic squamous cell Carcinoma, which was histologically consistent with the original cervical Carcinoma experienced by the patient 5 years prior. Her post-operative period was uneventful, patient referred to medical oncologist, she is currently on chemotherapy and on regular follow-up.



Figure 2: Intra operative picture of aspiration of the retroperitoneal cystic fluid.

DISCUSSION

Cystic metastases were very rare in patients with cervical cancer. To the best of our knowledge, the case presented here is the first description of a retroperitoneal cystic metastases of squamous cell carcinoma originating from the cervical cancer. However, cystic change is not rare in metastatic lymph nodes of squamous cell carcinoma of the head and neck organs, including tongue, tonsil and nasopharynx.⁵ In these, the most common type of cystic metastasis consists of a spontaneous or post-radiotherapeutic central breakdown of the tumor and the second most common is a true cystic pattern in which a grossly visible cavity, lined with neoplastic epithelium, occupies the central aspect of the node. In both types, the evidence of lymphoidal elements can be found at the periphery of the cystic metastasis, which reveal that the cystic metastasis occurred in a lymph node.⁵

In the current case, the pathogenesis may have been due to tumor cells obstructing a lymphatic vessel draining the retroperitoneum.

Diagnosis of metastatic retroperitoneal cyst mostly rely on the findings from radiographic examinations and the clinical history of the patient.⁶ Metastatic retroperitoneal cystic masses are not always easily characterized by CT, potentially leading to misdiagnosis. Therefore, if a patient with abdominal pain, nausea and vomiting presents with a history of a primary neoplasm, a secondary retroperitoneal cystic metastasis should be considered in the differential diagnosis of the retroperitoneal mass lesion. In patients with advanced cervical cancer, chemoradiotherapy and surgery plus chemotherapy are the main treatment options.⁷ However, patients with

metastases derived from cervical carcinoma present with a poor prognosis despite chemoradiation and surgical treatment. In the present study, the symptoms of the patient, including abdominal pain, nausea and vomiting were significantly relieved following cystojejunostomy with roux-en y reconstruction.

CONCLUSION

Study have reported a rare case of retroperitoneal cystic metastasis from cervical carcinoma. This should be considered in patient presenting with a lumbar mass, particularly in those with a previous history of malignancy. However, further observation for local recurrence and metastasis is needed.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Shruthikamal V, Reshma S, Akmal A. Retroperitoneal cystic metastasis from cervical cancer: a rare case report. Int Surg J 2017;4:2349-51.