**Homologous Type of Malignant Mixed Mullerian Tumor of the Uterus Presenting as a Cervical Mass**

Umur Kuyumcuoğlu, Ahmet Kale*

Department of Obstetrics and Gynecology, Dicle University Medical School, Diyarbakir, Turkey.

Malignant mixed Mullerian tumors are composed of a mixture of sarcoma and carcinoma. The carcinomatous element is usually glandular, whereas the sarcomatous element may resemble normal endometrial stroma (homologous or so-called carcinosarcoma). Here, we present a homologous type of malignant mixed Mullerian tumor of the uterus that presented as a cervical mass. We describe a 55-year-old patient who had a cervical mass arising from the uterus. We performed total abdominal hysterectomy and bilateral salpingo-oophorectomy and surgical staging (including peritoneal washings, suspicious areas or peritoneal surfaces sampled, infracolic omental sampling, pelvic and paraaortic lymph node sampling, and appendectomy). Carcinosarcomas of the uterine cervix are extremely rare, and when a postmenopausal woman with a cervical mass is admitted to the gynecology clinic, the physician should keep in mind that the mass might be a carcinosarcoma. [J Chin Med Assoc 2009;72(10):533–535]

**Key Words:** carcinosarcoma, cervical mass, malignant mixed Mullerian tumors

**Introduction**

Uterine sarcoma is a malignant tumor that arises from the smooth muscle or connective tissue of the uterus. Uterine sarcomas are rare neoplasms of the female genital tract. They have aggressive clinical behavior and a poor prognosis. The most common histological types are represented by leiomyosarcoma, endometrial stromal sarcoma, and carcinosarcoma (also known as malignant mixed Mullerian tumor). Carcinosarcomas are defined as tumors exhibiting a malignant epithelial component in association with a malignant stromal component; the latter may be homologous or heterologous to the native components of the uterus. Carcinosarcomas account for approximately 2–5% of all malignancies of the uterine corpus. Carcinosarcomas are rare neoplasms and usually associated with poor prognosis. Total abdominal hysterectomy and bilateral salpingo-oophorectomy and pelvic/paraaortic lymphadenectomy are optimal therapy for carcinosarcoma.1,2

Here, we describe an interesting case of carcinosarcoma (homologous type of malignant mixed tumor of the uterus) that presented as a cervical mass.

**Case Report**

A 55-year-old postmenopausal woman was referred to our clinic with a diagnosis of cervical mass. Her past medical history included no operation or systemic illness. Her presenting symptom was postmenopausal bleeding. On general examination, she was afebrile, with a blood pressure of 110/72 mmHg and a pulse rate of 84 beats/min. Abdominal examination was normal. Gynecologic examination revealed a 4 × 4 × 5 cm mass that protruded from the cervix (Figure 1). The patient’s hematologic workup demonstrated hemoglobin of 12.0 g/dL, hematocrit of 34.1%, white
blood cell count of 2.17/mm³, and platelet count of 122,000/mm³. These findings suggested the possibility of cervical myoma. Surgical management was planned.

The patient was taken to the operating room where the mass was excised by wide local excision under general anesthesia in the lithotomy position. Frozen section revealed that the mass was malignant. The decision was made to continue the operation, and we performed total abdominal hysterectomy, bilateral salpingo-oophorectomy and surgical staging (including peritoneal washings, suspicious areas or peritoneal surfaces sampled, infracolic omental sampling, pelvic and paraaortic lymph node sampling, and appendectomy).

The patient was transferred to the intensive care unit after surgery. She made a good recovery within 48 hours and was transferred to the gynecology unit. She was discharged home in good health 10 days after the operation. Histopathology showed a carcinosarcoma (Figure 2). FIGO stage was IIA, pelvic and paraaortic lymph nodes were negative, peritoneal washing cytology was negative, sampling biopsies from the staging surgery were negative, and the tumor was extended to the endocervical glands.

The patient was referred to the oncology unit for adjuvant postoperative radiotherapy. She remained without evidence of recurrent disease 18 months after surgical resection and pelvic radiation treatment.

Discussion

Carcinosarcomas of the cervix are rare neoplasms, and only a few cases have been reported in the literature. Most of these cases were postmenopausal, with the most frequent symptom being postmenopausal bleeding—occurring in 90% of cases. Carcinosarcoma grows as a large, soft, polypoid mass filling and distending the uterine cavity. On physical examination, uterine enlargement is present in 50–95% of patients, and a polypoid mass may be seen within or protruding from the endocervical canal in approximately 50% of patients.1–3 Our patient’s gynecologic examination revealed a 4 × 4 × 5 cm mass protruding from the cervix.

Concerning etiologic factors, radiation exposure to the pelvic area, infection with human papilloma virus 16, obesity, nulliparity, and exogenous estrogen use might have an effect on the development of carcinosarcoma.4 Spread of carcinosarcomas is primarily via the lymphatic system. The most frequent areas of spread are to the pelvis, lymph nodes, lungs and liver. This metastatic route suggests that carcinosarcomas spread by local extension and regional lymph node metastasis, as with endometrial adenocarcinoma.2,3 Bulky tumors, vaginal and parametrial metastases have been observed in carcinosarcomas of the cervix more frequently than in other epithelial malignancies. Spread of the disease at diagnosis can explain the poor prognosis related to carcinosarcomas.4 Abell and Ramirez reported a clinicopathologic review of 26 sarcomas of the uterine cervix, and found that the median length of survival of the patients was just 11 months.5 Another study found that in patients with carcinosarcoma confined to the uterine corpus (stage 1), the 2-year survival rate was 53%, whereas the survival rate dropped to 8.5% when the disease had extended to the cervix, vagina or parametria (stages II and III).6

Treatment of uterine sarcomas should include hysterectomy, bilateral salpingo-oophorectomy, and treatment of the pelvic lymphatics by irradiation or surgery.5
Pelvic and/or paraaortic lymphadenectomy is indicated for carcinosarcoma, which has a relatively high incidence of lymph node metastasis.\textsuperscript{1–3} Lymphadenectomy appears to be important for this malignancy, in order to discover occult metastatic disease and to provide patients with a therapeutic benefit. Carcinosarcoma also requires comprehensive peritoneal surgical staging, including peritoneal cytology, omentectomy, peritoneal biopsies, and, when appropriate, tumor debulking.\textsuperscript{1–6} We performed total abdominal hysterectomy and bilateral salpingo-oophorectomy and surgical staging (including peritoneal washings, suspicious areas or peritoneal surfaces sampled, infracolic omental sampling, pelvic and paraaortic lymph node sampling, and appendectomy) in our patient. She was referred to the oncology unit for adjuvant postoperative radiotherapy. She remained without evidence of recurrent disease 18 months after surgical resection and pelvic radiation treatment.

In conclusion, we have described a rare case of carcinosarcoma (homologous type of malignant Mullerian tumor) of the uterus that presented as a cervical mass. When a postmenopausal woman is admitted to the gynecology department with a diagnosis of a cervical mass, the clinician should keep in mind that the mass may be a carcinosarcoma, and preoperative work-up and surgical management should be performed as appropriate.

References