

Case Report
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Ovarian Cancer Refractory to Chemotherapy was Confirmed Colorectal Sarcoma

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ABSTRACT

Double primary cancer had been rarely reported. We experienced an ovarian cancer patient.

After cytoreductive surgery, She had adjuvant chemotherapy of 6 cycles. We evaluated chemoresponce with follow up CT scanning. There was slowly growing tumor from 3cm to 6cm. So we did secondary cytoreductive operation. The histologic report was entirely different cell type tumor. High grade sarcoma in Colon. We present this special case with brief review.

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There are lot of mechanism to explain the chemorisistance. the more information, the more difficulties to understand why it happened. We would like to present a special case who had ovarian cancer, After cytoreductive surgery, she had adjuvant chemotherapy But one tumor grow at the right upper abdomen. The tumor confirmed as sarcoma, entirely different cell types.

Case

A 71 years old woman was referred to hospital due to huge myoma with secondary degeneration

She complained low abdominal pain and discomfort. CA125 was 2172 u/ml. CT finding was 11cm irregular tumor aroused from left ovary and multiple peritoneal seeding. (Figure 1) Explo-laparotomy was done, Total abdominal hysterectomy, bilateral salpingoophorectomy, omentectomy and pelvic lymph node dissection was done. Cytoreductive operation was done completely. Without residual tumor less than 1cm.(Figure 2) Histologic report was high grade serous carcinoma with obturator lymph node metastasis. We did adjuvant chemotherapy with Taxol/ carboplatin/ bevacizumab for 6 cycles. There was still growing tumor even though chemotherapy. (Figure 3,4), PET/CT revealed 6cm sized tumor confined at right upper quadrant abdomen.

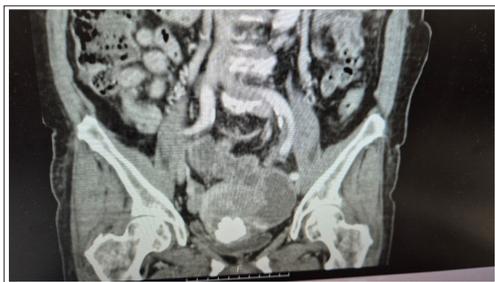


Figure 1: Preoperative CT Finding- Calcified 11cm Irregular



Figure 2: Postoperative CT Finding –No Residual Tumor



Figure 3: Postop 3 Months CT Finding. –Small Budding Appeared at RUQ Area



Figure 4: Postoperative 6Months CT Finding –Tumor Grows about 6cm Sized

Secondary cytoreductive surgery was done, T-colon segmentectomy and end to end anastomosis was done with bowel staples, The pathologic report was poorly differentiated colon high grade sarcoma. (Figure 5)

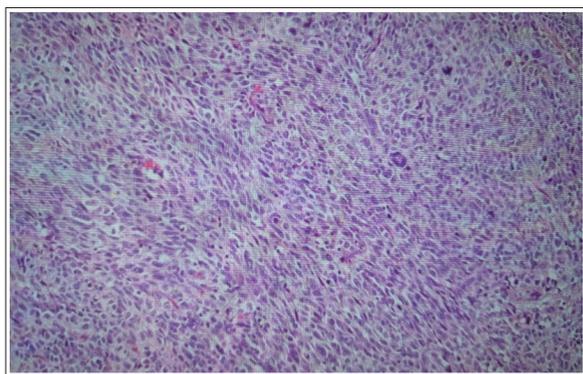
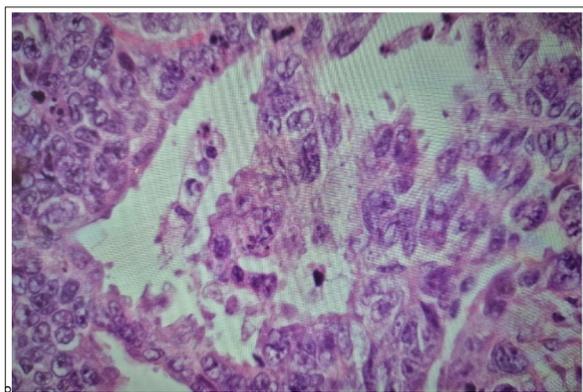


Figure 5: Cancer Cell Comparison: Ovary Vs Colon Muscle spindle cell of sarcoma



Ovarian Cancer Cell

We added another chemotherapy regimen for sarcoma.

Discussion

Chemoresistance causes disease relapse and metastasis

There are many theories to explain the chemoresistance mechanism. Reduced intracellular drug accumulation through drug efflux or reduced drug uptake. Alteration of drug targets, Drug inactivation. Altered DNA damage and repair, Evasion of cell death(apoptosis),

Tumor microenvironment factors, cancer stem cells, epigenetic modification, intratumor heterogeneity are examples to explain chemoresistance [1,2].

In recently molecular mechanism of chemoresistance include oncogenes tumor suppressor gene, mitochondrial alteration, DNA Repair, autophage, cancer stemness, and exosome. It means we don't understand enough the chemoresistance [3].

Primary colorectal sarcoma is an extremely rare malignancy. About 0.1% of all the colon cancer. It is associated with poor patient outcome. Surgery is still preferred treatment for colorectal sarcoma while the use of chemotherapy remained controversial [4,5].

Chemoresistance mechanism can't explain this case. Histologically entirely different cancer cell appeared at the second cytoreductive surgery. It means there is a possibility of double primary cancer.

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