

**Case Report**
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## Radiotherapy of an Isolated Port-Site Metastases after Laparoscopic Surgery for Endometrial Cancer: A Case Report

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**ABSTRACT**

Port-site metastases after gynecologic oncology procedures have a reported incidence of 1-2% and in the 95% of cases had simultaneous carcinomatosis or metastases to other sites at the time of port-site metastasis detection suggesting that the presence of port site implantation is a surrogate for advanced disease. At the moment, only poor cases of isolated port-site metastasis after endometrial cancer have been reported in literature, we reported one of this cases.

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**Introduction**

Port-site metastases were described after laparoscopic surgery for none and gynecological cancers. The first case of port site metastasis after laparoscopy was reported in 1978 and the first case after laparoscopic staging of an advanced cervical cancer was reported in 1992 [1, 2]. Port-site metastases have been reported after surgery in majority for ovarian cancer, but there are described after surgery of endometrium, cervix, fallopian tube and vagina, as well as non-gynecological cancers including stomach, gallbladder, large bowel, liver, pancreas and urinary tract. Port-site metastases after gynecologic oncology procedures have a reported incidence of 1-2% [3, 4]. In one of the largest published series of Zivanovic et al. the incidence of port-site metastases was 1.8% and the 95% of cases had simultaneous carcinomatosis or metastases to other sites at the time of port-site metastasis detection suggesting that the presence of port site implantation is a surrogate for advanced disease [5].

The incidence of port-site metastases in endometrial and cervical cancer appears to be much low [6]. J.D. Grant reported that the incidence among patients with early-stage endometrial cancer is reported at 0.18% to 0.33% in large studies [7]. At the moment, only poor cases of isolated port-site metastasis after endometrial cancer have been reported in literature [8, 9]. Most of these cases are associated with the presence simultaneous of metastases in various organs and apparatuses or non isolated port-site metastases.

**Case Report**

Here we reported the case of isolated port site metastasis after laparoscopic surgery for endometrial cancer. In July of 2014 a patient of 58 years has been subjected to adjuvant radiation treatment associated with chemotherapy after surgery for removal of port-site metastases in the abdominal wall at the UOC Radiotherapy of Parma.

The patient in February 2013 had undergone surgery hysterectomy-bilateral salpingoophorectomy, histological examination reported ADK endometrioid endometrial G1, infiltrating less half of the myometrium (stage IA sec FIGO 2009), in this specific case there was no indication for complementary radiation course.

In November of the same year for abdominal pain and hyperpyrexia, was made an abdominal TC that showed a double oval formation in relation of the right rectum abdominal muscle, in the iliac fossa, in the context of which it showed other small nodules and one adenomegalia in the right common iliac artery.

Histology confirmed metastases isolated port-site from ADK endometrioid G1/G2 of about 6 cm, with pelvic right lymph node negative (0/8).

The patient underwent then to 6 cycles of chemotherapy with carboplatin and Taxol, completed in May 2014.

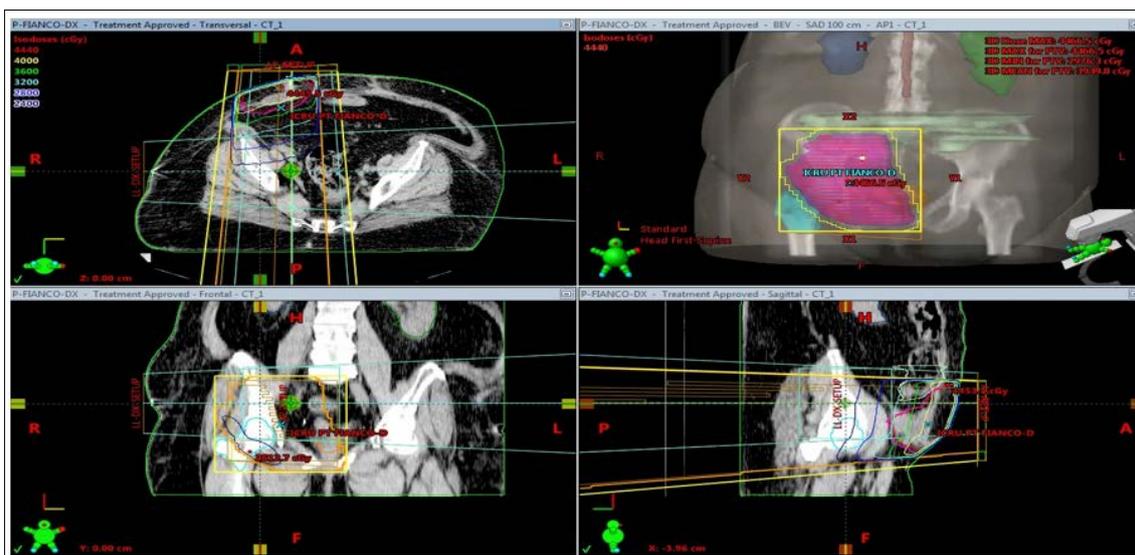
**A Successive Pet Confirmed no Sign of Malignant Recurrence**  
In the months of July and August of the same year was subjected to additional radiation treatment on right iliac fossa with a dose of 40 Gy in 20 fractions using photons X 6 My energy from linear accelerator and a direct anterior-posterior field.

They have not been irradiated lymph node chains in consideration no sign of recurrence at instrumental examination.

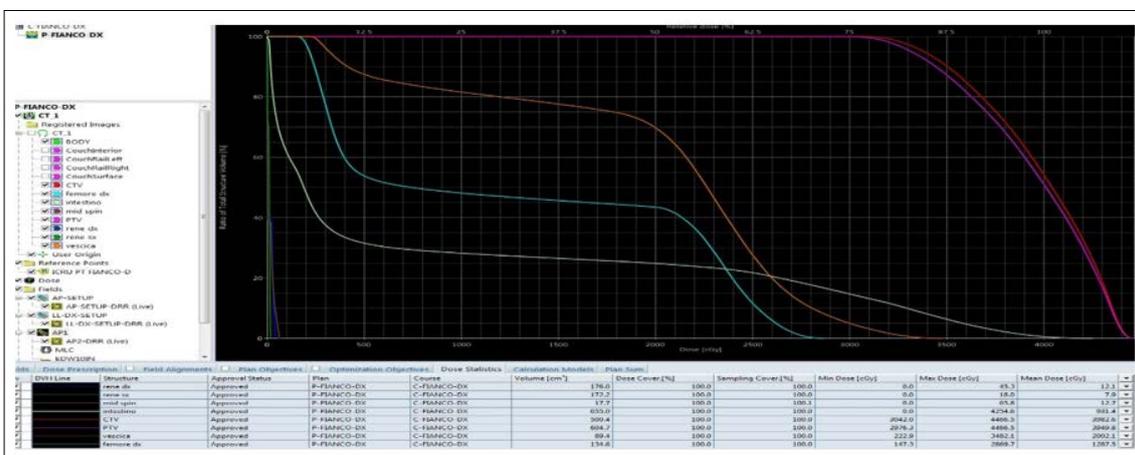
Positioning the patient supine, hands over his head who take the forearms, pillows under the head and three landmarks skin.

**Plan Coverage**

Dose of coverage to 100% of the PTV, 200 cGy to 100%, for an average total mean dose of 4000 cGy (minimum total dose of 3000 cGy and maximum total dose of 4466 cGy).



In superior figure the representation of plane with orientation of fields and coverage of CTV and PTV (red and violet line), in inferior figure representation of dose volume histograms and respective minimum, medium and maximum dose to CTV. (clinical target volume), PTV (planning target volume), bladder, right femur, intestines; of which has been met the respective dose constraints.



During treatment were carried out five images of kilo voltage for repositioning; also carried out five monitoring visits where the patient showed good tolerance to treatment with occasional episodes of diarrhea, it has also a check fifteen days after the end of treatment in which the patient did not reports problem.

After fifteen months was performed computed tomography control negative for loco regional recurrence or distant metastases.

After two years of follow up no signs of recurrence. Roughly half of patients remain disease-free at 2 years, although late recurrences at distant sites were observed and patients, thus, require regular surveillance.

In the year 2018, in the follow up, a TC highlights metastasis, thoracic lymphadenopathy and a metastatic localization in left rectus abdominis muscle.

The patient underwent then to 6 cycles of chemotherapy with carboplatin but successive follow up TC demonstrated disease progression; but the volume previously irradiated at the level of the right iliac fossa was still stable.

The patient was hospitalized with diagnosis of sepsis secondary to super infection of heteroplasic lesion in the left abdominal

wall. She was late transferred in hospice were she dead in 2019.

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