

CASE REPORT —

Primary Strumal Carcinoid Tumor of The Ovary As An Incidental Finding In Cesarean Section

Sezaryen Sırasında Tesadüfi Bir Bulgu Olarak Overin Primer Strumal Karsinoid Tümörü

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ABSTRACT

Introduction: Carcinoid tumours are slow growing and well differentiated neuroendocrine tumours. Primary ovarian carcinoid tumours are very rare and usually unilateral.

Case: In this case, an incidental case of mature cystic teratoma with primary ovarian carcinoid tumour treated with simple cystectomy during caesarean section is presented.

Conclusion: The surgery was decided to be adequate considering the nature of the tumour, strong fertility desire, and age of the patient.

Keywords: carcinoid tumor; cystectomy; ovary; teratoma

ÖZET

Giriş: Karsinoid tümörler yavaş gelişen ve iyi diferansiye nöroendokrin tümörlerdir. Primer ovaryan karsinoid tümörler oldukça nadirdir ve genellikle tek taraflıdır.

Olgu: Bu olguda, sezaryen sırasında basit kistektomi ile tedavi edilmiş primer ovaryan karsinoid tümörü ile birlikte tesadüfi bir matür kistik teratom olgusu sunulmuştur.

Sonuç: Cerrahinin tümörün yapısı, güçlü fertilite isteği ve hastanın yaşı göz önünde bulundurularak yeterli olduğu kararı verilmiştir.

Anahtar Kelimeler: karsinoid tümör, kistektomi, over, teratom

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INTRODUCTION

Carcinoid tumors are slow growing and well differentiated neuroendocrine tumors and 90 % of them originate from gastrointestinal and bronchopulmonary system [1, 2]. Primary ovarian carcinoid tumors are very rare and account for about 0.52% of all carcinoid tumors, and 0.1% of all ovarian carcinomas [3, 4]. Unlike metastasized ovarian tumors, primary carcinoid tumors of ovary are usually accompanied by germ cell tumor such as mature cystic teratomas [5]. Management of early stage tumors limited to the ovary is oophorectomy or salpingo-oophorectomy [6]. In literature, two cases have been reported which were treated only by cystectomy with no recurrence [3].

In the present case, we reported an incidental case of primary ovarian strumal carcinoid tumor treated by performing simple cystectomy during emergency cesarean section.

CASE

Thirthy-two year old gravida 2 parity 1 woman at 38 weeks of gestation admitted to our emergency clinic with complaint of labor pain. In her past medical history she was completely normal in her routine antenatal visits and she had a cesarean section at her previous pregnancy. She had slight groin pain and backache. Her vaginal examination revealed 2 cm cervical dilatation with 40% effacement, and clear amniotic fluid leakage. Ultrasound measurement of the fetus was consistent with her last menstrual period. Her fetal cardiotocography test was with regular contractions and reactive fetal heart rate pattern.

In the course of cesarean operation two smooth surfaced mobile cystic masses of 4 cm in the right ovary and 5 cm in the left ovary were observed. The whole abdomen was explored and no palpable lymph node or evidence of metastasis was found and bilateral ovarian cystectomy was performed, subsequently. Emergency operation did not allow frozen section procedure and the patient was discharged on her post-operative second day. Pathology revealed a mature cystic teratoma in the right ovary, and a strumal type carcinoid tumor with 1.5 cm in diameter arising from the mature cystic teratoma of the left ovary with the ovarian capsule free of involvement and defined as FIGO Stage 1A tumour (Figure 1).



Figure 1: Solid areas and aciner structures of uniform cells with hyperchromatic nucleus, H&E 20x.

Immunohistochemical stainings were chromogranine (+), synaptophysin (+), s100 (+), CK8/18 (+), pancreatic polypeptide (+), TTF-1(+) and Ki67 (+). Re-evaluation of the patient showed no findings of metastasis or symptoms of carcinoid syndrome. Additional surgery or chemotherapy was not planned considering age of the patient and histologic type of the tumor. Patient was informed and decided to be followed-up thereafter. The patient was set to a close follow up with gynecological examination and ultrasound imaging every 3 months and performance of CT scan every 6 months. The pelvic ultrasound and CT scan of the abdomen with serum tumor markers had shown no evidence of recurrence after postoperative six months.

DISCUSSION

Primary ovarian carcinoid tumors are evaluated under four sub-types: insular, strumal, trabecular, and mucinous. Insular type is the most common and related to carcinoid syndrome (flushing, diarrhea, cardiac murmur, hypertension, or pedal edema) even without metastasis the strumal type of "carcinoid tumors" has no specific clinical sign and rarely metastases [7]. The stage of the carcinoid tumor and its origin determine treatment approach and prognosis. Primary ovarian carcinoids are usually localized to ovary at the time of diagnosis (68%), and have better prognosis compared to other malignant ovarian tumors. Early stage tumors have a survival rate of near 100% compared to metastatic disease (33%) [3, 8].

Carcinoid tumors arising from a wall of a mature cystic teratoma tend to be remarkably smaller, less metastasizes, and association with carcinoid syndrome is rare [5]. Although there is no consensus for the treatment of ovarian carcinoid tumors due to small number of the reported cases, general approach is to treat these tumors as the same with ovarian tumors with low malignancy potential. Oophorectomy or salpingo-oophorectomy is the standard and adequate treatment option for early stage localized tumor [8]. However, there are reports of carcinoid tumors arising in mature teratomas treated with a conservative surgical approach, without evidence of recurrence disease after several months of follow up [9]. No recurrence was found in three and five years of follow-up in two cases that were reported to be treated with simple cystectomy in the literature [8].

In our case, there was no metastasis finding in her postoperative radiologic imaging. Regarding strong fertility desire, age of the patient and nature of the tumor, the surgical treatment was decided to be adequate. The patient was informed about her disease and a close postoperative follow up recommended. In patients, with primary ovarian carcinoids, cystectomy option should be evaluated, and discussed with the patient. We hope our case encourage oncologic surgeons for fertility or organ sparing surgeries.

REFERENCES

1. Robertson RG, Geigher WJ, Davis NB. Carcinoid tumors. Am Fam Physician 2006;74: 429-34.

2. Maggard MA, O'Connel JB, Ko CY. Updated population-based review of carcinoid tumors. Ann Surg 2004; 240: 117-22.

3. ModlinIM, Lye KD, Kidd M. A 5-decade analysis of 13,715 carcinoid tumors. Cancer 2003; 97: 934-59.

4. Kurabayashi T, Minamikawa T, Nishijima S, Tsuneki I, Tamura M, Yanase T, et al. Primary strumal carcinoid tumor of the ovary with multiple bone and breast metastases. J Obstet Gynaecol Res 2010; 36: 567-71.

5. Soga J, Osaka M, Yakuwa Y. Carcinoids of the ovary: an analysis of 329 reported cases. Exp Clin Cancer Res 2000;19:271-80.

6. Sulaiman S, Chia YN, Namuduri RV. Strumal carcinoid tumour of the ovary presenting with severe constipation. Singapore Med J 2013;54:e21-3.

7. Yamaguchi M, Tashiro H, Motohara K, Ohba T, Katabuchi H. Primary strumal carcinoid tumor of the ovary: A pregnant patient exhibiting severe constipation and CEA elevation. Gynecol Oncol Case Rep 2012;17:9-12.

8. Davis KP, Hatmann LK, Keeney GL, Shapiro H. Primary ovarian carcinoid tumors. Gynecol Oncol 1996;61:259-65.

9. Petousis S, Kalogiannidis I, Margioula-Siarkou C, Traianos A, Miliaras D, Kamparoudis A, et al. Mature ovarian teratoma with carcinoid tumor in a 28-year-old patient. Case Rep Obstet Gynecol 2013;2013:108582.