

Paratubal serous borderline tumor

Muzaffer
Temur¹,
Emel Kurtoglu²,
Rabia Kaya³,
Mustafa
Basaran⁴

Abstract

Paratubal borderline tumors are rarely seen among gynecologic malignancies. We report a case of 39-year-old multiparous woman who was underwent cesarean section during which paratubal cystectomy was performed and pathology revealed serous borderline tumor. After subsequent staging laparotomy stage 1A paratubal serous borderline tumor was diagnosed and follow-up was planned.

Keywords: borderline, serous tumor, paratubal cyst, cesarean section

Introduction

Paratubal cysts, which have almost benign characteristics, are common incidental findings in gynecologic and obstetric surgery. However, secondary neoplasia can arise in these cysts⁽¹⁾. Paratubal borderline tumors are rarely seen and identified as mild epithelial atypia and proliferation without stromal invasion⁽²⁾. Here, a case of paratubal borderline tumor which was diagnosed during a cesarean section is presented.

Case report

A 39 year-old, gravida 5, parity 4 woman with 39 weeks of gestation and onset of true labor attended to delivery room. Past medical and surgical history was not significant. Similarly her physical examination and vital signs were normal. On pelvic examination, cervical dilatation was 4 cm, cervical effacement was 60%, presenting part was the fetal head and was at the level of -2, cervix was medium and at the middle position. Ultrasonographic examination and non-stress test (NST) were performed for the assessment of fetal well being. Fetal biometry was appropriate with gestational age with normal amniotic fluid.

Despite active contractions, cesarean delivery was planned due to failure in descensus of the presenting fetal head. Intraoperatively, a paratubal cyst was noticed in the underneath position along ampullar region of left tuba uterina and removed by partial salpingectomy. The pathology revealed borderline serous papillary tumor.

Macroscopically, the resected cyst was pale pink in colour, 4x3x2.5 cm in diameter and filled with mucoid material beneath the tuba uterina, 3 cm in length. Microscopically, the cyst was lined by one-layer cuboidal epithelium and there were serous papillary proliferations connecting to the wall of the cyst by a thin peduncle (Figure 1, Figure 2). The lesion was tufting and branching in the cyst and there were stratification and mild atypia in the epithelium (Figure 3). No stromal or vascular invasion was seen.

After the diagnosis of borderline paratubal tumor, the patient was informed about the disease and suggested subsequent staging laparotomy. She underwent staging laparotomy consisting of total abdominal hysterectomy,

bilateral oophorectomy, right salpingectomy, omentectomy, peritoneal cytology and bilateral pelvic lymphadenectomy at a referral center and was diagnosed with stage 1A paratubal serous borderline tumor two months ago. With these findings, a follow-up with no additional treatment was planned.

Discussion

The paratubal tumors are commonly present in the third decade and usually accompany gynecologic diseases, but they can also be seen in adolescent period and rarely diagnosed during cesarean section by removing adnexal mass, as well as our patient^(3,4).

Paratubal cysts are usually diagnosed by imaging methods or during surgery incidentally. Although they have predominantly benign structures, borderline and malignant transformations with different histopathologic types have been reported in previous reports^(5,6).

The clinical presentation of these tumors can either be asymptomatic or may cause an emergency^(7,8). It may be preferred to perform excisional biopsy for the asymptomatic masses as we did in our experience and the evaluation of these masses can be done by frozen-section during the surgery if possible. But it may be diagnosed by histopathologic examination days after the operation.

Borderline paratubal tumor was first reported by Zehn et al. in 1996⁽⁹⁾. This rare tumor includes epithelial proliferation and complexity without stromal invasion⁽²⁾. Despite the similar histologic appearance with ovarian borderline tumor, the biological behavior was not clearly defined. Hence, there is no consensus about the optimal surgical procedure of the disease. Fertility-sparing surgery, which includes partial or complete salpingectomy and salpingostomy with tubal cystectomy can be preferred for the patients desiring fertility as there was no report of positive lymph nodes or metastatic disease in borderline paratubal tumors in the literature^(7,9,10). However, complete surgical staging including peritoneal washings, hysterectomy, bilateral salpingo-oophorectomy, pelvic-aortic lymphadenectomy, omentectomy, and biopsies, can be an option for patients with undesired fertility and fertility-sparing

1. Division of Obstetrics and Gynecology, Eregli State Hospital, Konya
2. Department of Obstetrics and Gynecology, Ondokuz Mayıs University, Samsun
3. Division of Pathology, Edirne State Hospital, Edirne
4. Department of Obstetrics and Gynecology, Meram Education and Training Hospital, Konya

Correspondence:
Dr. Emel Kurtoglu
e-mail: emel0022@
mynet.com

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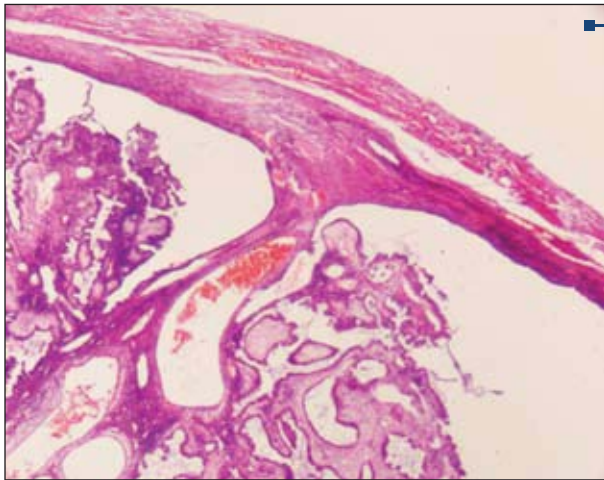


Figure 1. Papillary epithelial proliferation attached to the cyst wall with a stalk (H&E, x200)

Figure 2. Tuba uterina on the lower left corner and the detached cyst lined by single cuboidal serous cells on the upper right corner (H&E, x100)

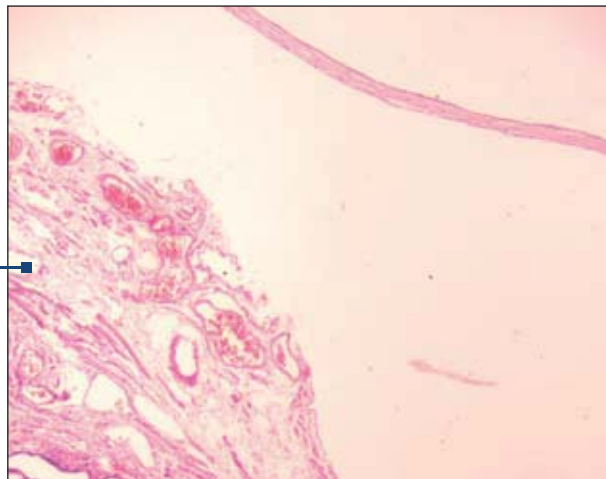
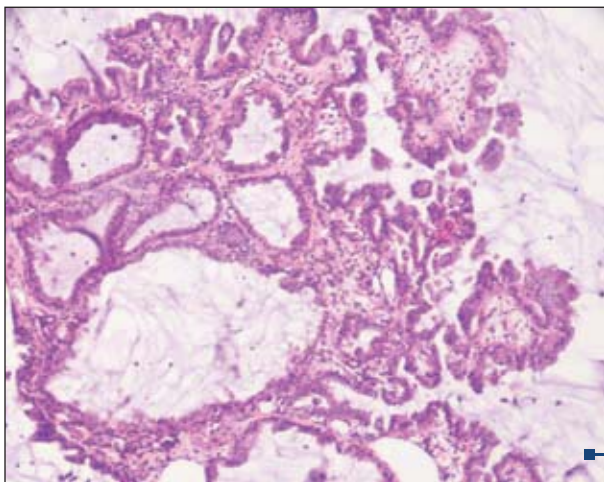


Figure 3. Papillae with complex branching and tufting, lined by mild atypical epithelial cells showing stratification (H&E, x400)

comprehensive staging^(3,8). In our case, the patient who had no desire of future childbearing underwent complete surgical staging.

Conclusions

Although paratubal borderline tumors have low malignant potential and low recurrence probability, close

follow-up is essential especially after fertility-sparing surgery. Careful pelvic examination and ultrasonography with evaluation of tumor markers (Ca 125 and Ca 19.9) up to first 10 years after surgery has been recommended in control visits⁽¹¹⁾. Nonetheless, more case reports seem to be necessary to understand the optimal treatment and prognosis of the disease. ■

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