



A CASE REPORT ON PARAOVARIAN BENIGN SEROUS CYSTADENOMA

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ABSTRACT

Serous tumors usually occur on the ovarian surface and sometimes rarely occur as a primary peritoneal tumor. The origin of extra-ovarian serous tumors is still unclear. Here we present a rare case of para-ovarian benign serous cystadenoma.

Case report: A 24-year-old nulligravida with primary infertility came with chief complaints of blood-stained mucus discharge for 12 days and irregular cycles for the past two years. The radiological examination showed a huge cyst in the right adnexal region, for which she was operated and intraoperatively it was found to be a para-ovarian cyst, hence subsequently removed. The histopathological examination revealed benign serous cystadenoma.

Conclusion: In this case report, we present a rare case of para-ovarian benign serous cystadenoma diagnosed in women of reproductive age group with primary infertility.

KEYWORDS :**INTRODUCTION**

Para-ovarian cysts are found in between ovary and broad ligament. They constitute about 5-20% of the adnexal mass. They are usually benign and asymptomatic. The incidence of malignancy in these cysts is 2-3%. Histopathologically they are classified into three types, mesonephric, paramesonephric, or mesothelial. They are a homogenous group of cystic masses originating from the mesosalpinx and lying adjacent to the fallopian tube and ovary. The rate of torsion, malignant transformation is very low in this group.

CLINICAL PRESENTATION

A twenty-four years old nulligravida with primary infertility came to Sree Balaji Medical College and Hospital (out-patient department) with complaints of blood-stained mucus discharge for the past 12 days and history of irregular cycles for the past two years. The patient had no other significant history suggestive of endometrial tuberculosis.

On examination, the general condition was stable. Abdominal examination (per abdomen) showed a mobile mass of size 14 to 16 weeks, felt more on the right side of the abdomen with cystic consistency. On per vaginal examination, the cervix was posterior, uterus retroverted, a mobile non-tender cystic mass was felt on the right fornix. Abdominal ultrasound examination showed a right sided para-ovarian cyst (size: 13 by 11 cm) noted in the right adnexa. Left adnexa is normal. The endometrium was thickened up to 12 mm on day 7th of the cycle. The MRI Pelvis revealed a large cyst (size: 16 by 13 by 7 cm) in the right adnexa without solid component, probably exophytic mass. Routine blood investigations showed no abnormalities. Her Ca-125 is 205 (index). The endometrial evaluation was done and found to be secretory endometrium and endometrial tuberculosis was ruled out. The risk malignancy index score was calculated, and it was found to be zero.

The patient underwent exploratory laparotomy under spinal anesthesia. Intraoperative findings revealed right-sided para ovarian cyst (size: 10 by 9 cm) and right fallopian tube was stretched over the cyst, B/L ovaries and tube were normal. No evidence of endometriosis or tuberculosis was found. The Cyst was enucleated and sent for Histopathology. Chromotubation was done on both sides and a spill was present. Postoperative period was uneventful. On Histopathological examination, a benign serous cystadenoma was diagnosed.

DISCUSSION

Para-ovarian cystadenomas are usually unilateral and rarely cause an internal hemorrhage, torsion or rupture. Large cysts can sometimes produce pain. These lesions arise from embryonic remnants or from peritoneal inclusions that are usually benign. Clinically para ovarian cyst cannot be distinguished from the ovarian cysts. Para ovarian cysts can be seen in any age group; the most commonly encountered age group is the third and fourth decade of life (Genadry, Parmley, & Woodruff, 1977).

Para-ovarian cysts are simple cysts. There are three histopathological types according to the cells lining the cyst wall. Majority of them, approximately 68%, arise from the mesothelium covering the peritoneum composed of the flattened epithelium. Around 30% arise from the mullerian remnants (paramesonephric) and 2% from the Wolffian remnants (mesonephric). The mullerian remnants are lined by secretory ciliated columnar or cuboidal epithelium. The Wolffian remnants are lined by flattened epithelium or cuboidal epithelium. Various types of neoplasms can also be found in the para-ovarian cyst and are not always benign condition. These include serious cystadenoma, serous adenofibroma, papillary serous malignancy, and cystadenocarcinoma.

In one case series study (Pepe et al. (REF)) out of 59 cases of para ovarian cyst, only 1 case of serous cystadenoma (1.69%) was reported (Pepe, Panella, Pepe, & Panella, 1986). In another study out of 140 cases, eight cases were reported as neoplasm (four benign cystadenoma and remaining four cases as malignant cystadenocarcinoma) (Genadry et al., 1977). Stein et al. (Stein, Koonings, Schlaerth, Grimes, & dAblaing, 1990) concluded the overall incidence of malignancy was 2% in these cysts. Savelli et al. have reported a higher incidence of neoplastic paraovarian tumours, 15 out of 50 cases.

It is challenging to differentiate between an ovarian and para ovarian cyst clinically. Sonography of cystadenoma shows a cystic mass, usually containing few solid nodules and a few septations occasionally (Korbin, Brown, & Welch, 1998). Apart from this to diagnose these cysts using ultrasound is not feasible and requires great awareness and accuracy (Darwish, Amin, & Mohammad, n.d.). In our case the

ultrasound of the whole abdomen, showed a right sided cyst (size: 13 by 11 cm) noted. On MRI, a large abdominopelvic cyst (Size: 16 by 13 by 9 cm) was seen in right adnexa, the right ovary was seen attached to the cyst. Kishimoto et al. concluded that on MRI examination, these cysts were homogenous in nature located near the ipsilateral round ligament and uterus. The most important feature is visualizing the ovary separately (Kishimoto et al., n.d.), which, in our case, was seen attached to the cyst. Hence patient was taken up for exploratory laparotomy, which confirmed the diagnosis of the right para ovarian cyst.

CONCLUSION:

The probability of the incidence of the neoplastic tumors in the large para-ovarian cyst is substantially high. Hence, caution must be exercised to diagnose clinically when detected, and it is often very challenging to differentiate benign versus malignant nature of the lesion. Radiological techniques such as Ultrasound and MRI can aid the diagnosis non-invasively. However, laparoscopy or laparotomy should be a preferred procedure to surgically excise large para-ovarian masses and subsequently perform histopathological examination to rule out the malignancy.



Figure: Intraop picture of right paraovarian cyst

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