

Bilateral Ovarian huge Benign Papillary Serous tumor in a teenage girl: A Case Report

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Abstract

An 18-year-old female patient came with the complaint of abdominal pain and diagnosed with some non-mobile mass above the umbilical level which further ruled as big cysts like upon USG. Upon Surgical intervention, it was turned out as a Benign Papillary Serous tumor which was confirmed diagnosis upon histopathological examination.

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A case Report

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Abstract:

Objective: Ovarian cysts are an extremely common gynaecological problem in adolescent and at teenage. Majority of ovarian cysts are benign with minority of cases turns into malignant. Ovarian serous cystadenoma are rare in children and they further develop with oncological changes as benign or malignant papillary serous tumor.

Case report: 18 year old female patient was brought to the clinic with complain of heaviness in abdomen and abdominal pain. On per abdominal examination some cystic non-mobile mass was palpable up to 6cm above the umbilical level. On ultrasonographic examination cystic mass of 17 x 10 x 8 cm was found at the right ovary and was not seen separately, another 7 x 6 cm cystic swelling was found arising from left ovary. Serum CEA and CA 125 was done & found to be 1.29 and 14.9 respectively for further onco analysis which was found to be within normal limits. With skilful surgical technique the tube was gently separated from the mass and the cystic mass from both the ovaries were removed. The cystic masses were sent for further histopathological examination which claimed Benign Papillary Serous tumor.

Conclusion: Benign Papillary Serous tumor in teenage girl is mostly uncommon and hard findings. Cysts are common but papillary serous tumor makes a different story. Careful USG and early diagnosis of such cysts and skilful surgical removal of such can makes a difference in quality of life in teenage.

Keywords: Benign Papillary Serous tumor, ovarian serous cystadenoma, Ultrasonographic (USG) examination, Teenage girl, Ovarian Cancer

Background

A serous tumor comprises of the surface epithelial-stromal tumor group of ovarian neoplasms, which mainly derived from epithelium of mullerin. They are mostly common neoplasms with a strong tendency to bilateralism. They account for half of all ovarian tumors. Mostly 60% of them are mostly benign (cystadenoma) in nature and, 10% of them are borderline and 30% part of them is malignant (cystadenocarcinoma) in nature. Cystic lesions of the ovary are most common during infancy and adolescence, which are hormonally active periods of development [1]. Cysts are mostly non-neoplastic in children and could be categorized as follicular, simple, and corpus luteum cysts. Ovarian cysts rarely grow immense. Ultrasonography scanning permits early detection and appropriate treatment. Occasionally, ovarian cysts reach enormous dimensions without raising any symptoms. A few cases of giant ovarian cysts have been sporadically reported in the literature [1]. We presented a case of a huge papillary serous benign ovarian cyst in an 18-year old girl, with characteristics of ovarian serous cystadenoma both grossly and microscopically.

Case Presentation

An 18 year old female patient was brought to the clinic with complain of heaviness in abdomen and abdominal pain. On per abdominal examination some cystic nonmobile mass was palpable up to 6cm above the umbilical level. Vital were in normal range. On ultrasonographic examination cystic mass of 17 x 10 x 8 cm was found. Right ovary was not seen separately. Another 7 x 6 cm cystic swelling was found arising from left ovary. Serum CEA and CA 125 was done & found to be 1.29 and 14.9 respectively, which is within normal limits. After

preoperative fitness patient was taken to the operation theatre. Pfannenstiel incision was given considering patient's age and cosmetic factors. With good anesthetic support and muscle relaxation exteriorization of cystic mass was possible. Mass was arising from the right side ovarian tissue and right fallopian tube was stretched out over the mass like a very thin strip. With skillful surgical technique the tube was gently separated from the mass and the cystic mass of about 19 x 15 x 10 cm was taken (Figure-1). Right side ovary and tubes were preserved. The right fallopian tube was stretched to about 18-20 cm long. Serosa of tube was sutured with vicryl 4-0 in such a way that the tubal opening was bear right ovary and towards the ovary. Skillful and sterile salpingopexy to the ovarian tissue was done. On left side 8 x 7 cm cystic mass was separated and tube and ovary was preserved, closure done and post operative period was uneventful. Both cystic masses were sent for histopathological examination which turned out to be bilateral benign papillary serous tumors. Postoperative follow up after 1 week was done and stitches removed. Patient resumed the routine activity.

Discussion: The most common clinical presentations of ovarian cysts are abdominal pain, nausea and vomiting, and a history of previous episodes of similar pain and low grade fever [4, 5]. In pubertal girls, the differential diagnosis with functional cysts can involve some delay. A functional cyst is mainly a unilocular and anechoic cyst with thin borders. Second differential diagnoses of ovarian cysts are omental cysts. Omental cysts occur in all age groups, but most often they present in children and young adults. Other diagnoses may be mesenteric cysts, cysts arising from retroperitoneal structures like pancreatic pseudo cysts, urinary retention, bladder diverticulum, hydronephrosis, cystic lymphangiomas, choledochal cysts, splenic cysts, multicystic dysplastic kidney, gastrointestinal duplication cysts and large uterine tumors [7]. Malignant transformation is not well known but clonal origin of benign CA, borderline tumors and low-grade epithelial carcinomas is suspected as differential [3]. Management of ovarian cysts depends on the patient's age, the size and structure of the cyst and menopausal status. Surgical management of cysts is by laparotomic or laparoscopic cyst excision or cystectomy with oophorectomy. In addition, the contralateral ovary should be examined and where it looks suspicious, a frozen section will assist in deciding whether to remove it or not [2, 6]. Some authors have emphasized that intact cyst removal, with gradual rolling of the mass off the inferior vena cava, is the optimal technique. On the contrary, Hunter *et al.* have reported that gradual decompression prevents rupture of the cyst capsule and greater dissemination [8]. The potential complication of repeated paracentesis is the intraperitoneal spillage of cyst components. This could result in tumor seeding of the peritoneal cavity or paracentesis tract if the cyst is malignant. Other complications associated with repeated paracentesis include infection, bleeding, and an increase in the number and density of peritoneal adhesions, making eventual cyst removal even more difficult [9]. In the cases of emergency surgery that do not allow waiting for results of tumor markers, decision of choice, laparoscopy versus laparotomy, can be based on size and structure of the enlarged ovary [1,9]. Low malignant recurrences have been reported more than ten years after initial surgery in the adult patient population, so it may be safe to assume that those diagnosed in adolescence should be observed into adulthood. Although adherence to long-term follow-up can be difficult, as evidenced by patient who was lost to follow-up since years, this should not alter the decision to perform a conservative surgical procedure in an attempt to preserve a patient's fertility [10]. A gynecologist should go for Histopathological evaluation and blood biochemistry must be done in case of family history of any ovarian cancer. Germ cell tumors are the most important causes for giant ovarian masses in children, but epithelial tumors must not be forgotten in the differential diagnosis.

Key Clinical Message:

Ultrasonography should be done with patience to diagnose such uterine cysts which are many a time avoided as normal cysts in early age or teenage patient. Skillful and sterile surgical techniques must be used to avoid early infertility chances and post partum depression at late stage of surgery in teenage patients.

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