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Case Report

A rare case of par ovaraian cyst of neoplastic origin

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Abstract: Parovaraian cysts are simple cysts arising from the adnexa occurring most commonly in the women of reproductive age group. Rarely can they be of neoplastic origin. Female of 21 years presented with pain in abdomen. On basis of clinical examination, ultrasonography and biochemical tumour markers it was diagnosed as ovarian tumour. At laparotomy it was seen to be parovarian cyst of 12cm x 14cm size. On histopathology it was proved to be a neoplastic parovarian cyst - serous cystadenoma.
Keywords: Parovarian cyst, Neoplastic parovarian cyst

INTRODUCTION

Parovarian cysts develop in the remnants of upper part of wollfian ducts and are retention cysts [1]. They originate from mesothelium [1]. They are commonly seen in the age group of 30-40 years [4, 7]. These cysts are usually symptomless but they may present occasionally with pelvic pain, dyspareunia [2].True nature of the cyst is identified at laparotomy [2].Complications include torsion (most common), rupture , infection and rarely malignancy [5].Diagnosis is confirmed on histopathology by the presence of smooth muscle in the cyst [5].

CASE REPORT

A 21 years old female patient was reported at R.D.Gardi Medical College, Ujjain, M.P, India on 13-12-2013 with chief complaints of pain in lower abdomen from 1 year and lump in abdomen from 4-5 months.On General Examination, vitals were within normal limits. Cardiovascular system and Respiratory system were within normal limits.

Abdominal Examination showed a cystic, smooth, non tender, mobile mass arising from the pelvis and extending upto umbilicus. No organomegaly noted. On Per Vaginum Examination a right adnexal cystic, mobile, non tender mass which was separate from uterus was felt. Uterus was normal in size and shape. Benign Ovarian tumour was the Provisional Diagnosis made after history and clinical examination.USG pelvis reported as? Mesenteric cyst/right ovarian cyst. Her hemogram was within normal limits and her blood group was A Rh positive. Tumour markers AFP- 0.565 ng/ml, CA 125- 62.6 U/ml and Beta HCG <2.39 m IU/ml. Laparotomy showed a large cystic mass, arising from just below the Right fallopian tube, extending vertically upto umbillicus, smooth suface, not adherent to surrounding structures.Uterus & both adnexa with ovaries were intact and not adherent to tumor, bladder was free. There was no evidence of metastasis on peritoneal surface, omentum, liver and intestines. Cyst removed (12 cm x 14 cm) and sent for histopathological examination. Histopatholocial diagnosis was serous cystadenoma.

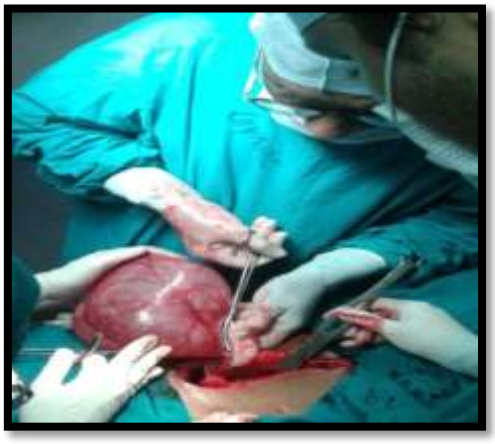

Fig-1: Right par ovarian cyst

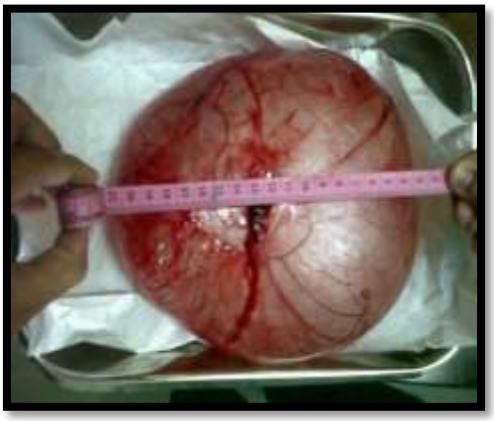

Fig-2: Right par ovarian cyst (12 x 14 cm)

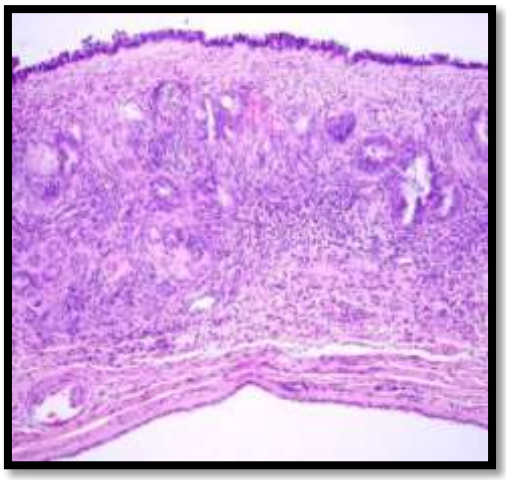

Fig-3: Ciliated columnar cells

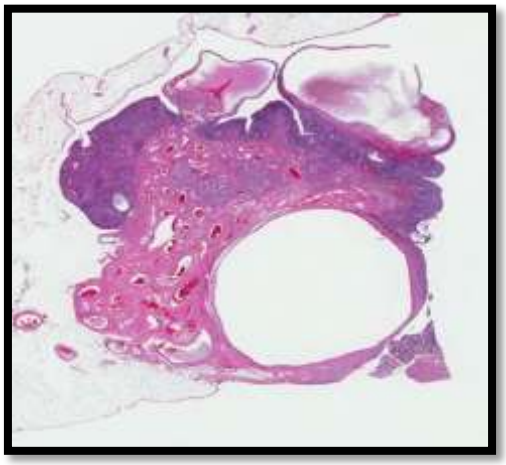

Fig-4: Mullerian remnants (High power view)

DISCUSSION

Par ovarian cysts are simple retention cysts in the broad ligament.They originate from mesothelium covering the peritoneum (68%), paramesonephric/mullerian remnants (30%) or mesonephric/wollfian remnants (2%)[8,9].They Constitute 10% of adnexal masses.they occur in women of all age groups , more common in women aged 30-40 years.Most of the time they are small and assymptomatic , although are occasionally large , resulting in pelvic pain .In spite of causing rare symptoms ,complications due to torsion , internal hemorrhage and rupture of massive sized cysts are seen [10] . They are thin walled and unilocular hence, posing difficulty in differentiating it from ovarian cyst on imaging. On CT, most parovarain cyst are unilocular, thin walled and anechoic. Uncommonly, the cysts may show internal echoes and thin septations. Rarely, features suggestive of malignant changes such as papillary projections, mural nodules, or thick septations are seen. Visualisation of a normal ipsilateral ovary close to but separate from the adnexal cyst is an important MR finding. Parovarian cysts are rarely diagnosed by radiologists [11]. They should be considered in differential diagnosis of acute abomen in females. Parovarian cysts are usually single, but bilateral lesions have been reported. Torsion of parovarian cysts are usually seen in the reproductive age group especially in women having tubal ligation by Pomeroy method [13]. Torsion is three times more common in pregnant women likely to be related to rapid growth spurt. Usually they are of non neoplastic origin. Neoplastic par ovarian cysts are rare with incidence of 1.69-5% of all par ovarian cysts .neoplastic transformation can be papillary serous cyst adenoma, endometroid cystadenocarcinoma, serous cystadenocarcinoma, mucinous cystadenocarcinoma. Both open surgery and laparoscopy is advocated [12]. In most of the cases true nature of neoplastic origin is confirmed only after histopathological examination.

CONCLUSION

Parovarian cysts constitute of 10 % adnexal masses. Usually they are simple cysts rarely can be neoplastic. All parovarian cysts should be removed surgically when symptomatic or large size and diagnosis confirmed on histopathology.

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