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Case Report

An ovarian mucinous cystadenoma with adnexal tuberculosis: a case report

Ashok Panchonia, Chandrahas V. Kulkarni, Rakesh Mehar, Garima Malpani*

Department of Pathology, M.G.M. College & M.Y. Hospital, Indore-452001, M. P., India

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***Correspondence:**

Dr. Garima Malpani,

E-mail: dr.garima@ymail.com

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ABSTRACT

We report the occurrence of a case of a benign ovarian tumour- mucinous cystadenoma ovary with adnexal tuberculosis. Our case was a middle-aged Indian woman who presented with abdominal distension and discomfort at the gynaecology clinic of M.Y. hospital, Indore. The data were collected by history-taking, clinical examination, laboratory investigations, transabdominal ultrasonographic examination, and by histopathological study of the excised surgical specimen. It was reported as ovarian mucinous cystadenoma with adnexal TB. This case report emphasizes the significance of thorough evaluation of all women presenting with vague abdominal pains and thorough search of any other pathology in the specimen, like in our case it was tuberculosis. With the increasing awareness of such conditions, more and more cases could be detected and reported.

Keywords: Ovarian mucinous cystadenoma, Adnexal tuberculosis

INTRODUCTION

Ovarian mucinous cystadenoma is a benign tumour that arises from the surface epithelium of the ovary. It is a multilocular cyst with smooth outer and inner surfaces. It tends to be huge in size. Of all ovarian tumours, mucinous tumours comprise 15%.^{1,2} About 80% of mucinous tumours are benign, 10% are border-line and 10% are malignant. Although benign ovarian mucinous tumours are rare at the extremities of age, before puberty and after menopause,³ they are common between the third and the fifth decades.⁴ The most frequent complications of benign ovarian cysts, in general, are torsion, haemorrhage and rupture. As it contains mucinous fluid, its rupture leads to mucinous deposits on the peritoneum (pseudo-myxomaperitonei). This report presents a case of ovarian mucinous cystadenoma in a 30 year old woman along with an additional pathology of adnexal tuberculosis.

CASE REPORT

A 30 year old woman presented at the gynaecology outpatients' clinic of M.Y. hospital, Indore with a marked abdominal distension and discomfort. The patient has 1 living child. The patient complained of gradual abdominal enlargement since 2 years. The patient had no previous medical diseases or surgical operations. Her menarche commenced at the age of 13 years with subsequent regular cycles. She denied the use of any medications. General examination revealed normal vital signs other than a slight tachypnea (Respiratory rate was 24/minute). Her body weight was 65 kg; her height was 160 cm. Secondary sexual characters were evident. On abdominal examination, an ill-defined pelvi-abdominal mass was noticed, with evident dermal striae.

The abdomen was cystic tense on palpation without tenderness or shifting dullness. Pelvic examination revealed normal sized non-pregnant firm uterus and fullness in the cul-de-sac and right adnexa.

Transabdominal ultrasonography verified a multi-loculated cyst without solid component, surface papillary projections, with minimal free intraperitoneal fluid. The patient was asked to do some laboratory investigations including full blood picture, serum biochemistry, cervical cytology and cancer antigen (Ca-125). A plain chest X ray on erect position was also done. All the tests were normal except for a slightly raised CA-125 levels. Our patient was counselled and signed informed consent for surgical exploration. Under general anaesthesia, an initial midline sub-umbilical incision was done where a huge cystic mass was noticed arising from the right ovary. The uterus along with left sided tube and ovary was also removed because adhesions were seen and the tube was dilated. No ascites or enlarged para-aortic lymph nodes were discovered. Then the entire specimen was sent to us in M.Y. hospital, pathology department for histopathological examination.

The size of the tumour was 15×15×8 cm with 2.5 kg in weight. Microscopic examination revealed a cyst lined by a single layer of non-ciliated columnar epithelium without stromal invasion, the picture of which is compatible with mucinous cystadenoma. The left adnexal mass measured 5×4 cm. On cut was filled with cheesy material. Microscopically, attached left adnexal mass showed the presence of granulomatous reaction comprising of caseous necrosis, epithelioid cells and langhans type of giant cells. The diagnosis was given as tuberculosis.

Postoperative recovery was fine and the patient was discharged on the 5th postoperative day to be followed-up every 3 months.



Figure 1a & 1b: Gross picture of the specimen showing the adnexal mass filled with cheesy material.



Figure 2: Microscopic picture showing intestinal type epithelium in mucinous cystadenoma-ovary.

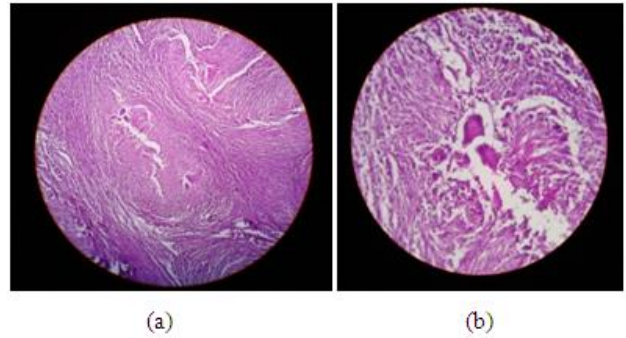


Figure 3: Microscopic picture from adnexal mass showing granulomatous reaction with caseous necrosis and langhans giant cells. (a) Low power 10x (b) High power 40x.

DISCUSSION

Detection of ovarian cysts causes considerable worry for women because of fear of malignancy, but fortunately the majority of ovarian cysts are benign. Mucinous cystadenoma is a benign ovarian tumour. It is reported to occur in middle-aged women. It is rare among adolescents⁵ or in association with pregnancy.⁶ On gross appearance, mucinous tumours are characterised by cysts of variable sizes without surface invasion. Only 10% of primary mucinous cystadenoma is bilateral.⁷ In our case, the tumour was unilateral, affecting the left ovary. The cyst was filled with sticky gelatinous fluid rich in glycoprotein.

Histologically, mucinous cystadenoma is lined by tall columnar non-ciliated epithelial cells with apical mucin and basal nuclei. They are classified according to the mucin-producing epithelial cells into three types.⁴ The first two, include endocervical and intestinal epithelia. The third type is the mullerian, which is typically associated with endometriotic cysts.⁸ Our case has epithelium of intestinal-like type as many goblet cells were noticed. Management of ovarian cysts depends on the patient’s age, the size of the cyst and its histopathological nature. Conservative surgery as ovarian cystectomy and salpingo-oophorectomy is adequate for benign lesions.⁷

India, a country with over 1.21 billion people, has the highest burden of tuberculosis in the world, accounting for 20% of the global incidence of TB, and an even higher share of global incidence of multidrug resistant TB.⁹ So we cannot afford to miss diagnosis of tuberculosis. If we would have missed the diagnosis, there would have been delay in the treatment of the patient and she could have developed other tubercular foci elsewhere in the body. In our patient although there was no clinical suspicion of TB by the doctor but still we found an additional pathology by careful inspection of the specimen.

After surgery, the patient should be followed-up carefully as some tumours recur.⁵ Although the tumour was

removed completely and intact with the affected ovary, our patient was given appointments to be reviewed every 3 months for a year with simultaneous anti tubercular treatment.

CONCLUSION

In our case we found an additional pathology of adnexal tuberculosis with mucinous cystadenoma. Although the patient did not have symptoms of tuberculosis but still through thorough evaluation of the specimen we were able to get an additional finding. TB is such an important diagnosis that it should not be missed in any case. With the increasing awareness of such conditions, more cases could be detected and reported.

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