International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Jain A et al. Int J Reprod Contracept Obstet Gynecol. 2025 Feb;14(2):665-667
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20250215

Case Report

Ovarian mucinous cystadenofibroma: a case report

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Received: 23 December 2024
Revised: 19 January 2025
Accepted: 20 January 2025

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ABSTRACT

Ovarian adenofibroma is a rare benign tumour originating from the stroma and germinal lining of the ovary. We describe here the case of a 54-year-old female with an ovarian mucinous cystadenofibroma that was diagnosed as a cystic mass of the ovary with neoplastic etiology before surgery. The tumour was a large cystic mass of size 30×25×10 cm arising from left ovary. The patient successfully underwent exploratory laparotomy with excision of large ovarian mass f/b total abdominal hysterectomy with B/L salpingoopherectomy.

Keywords: Mucinous cystadenofibroma, Benign, Ovarian

INTRODUCTION

Ovarian cystadenofibroma is a very rare benign tumour that originates in the epithelium and includes diverse structures composed of cystic and solid fibrotic tissues.[1] They account for about 1.7% of all ovarian neoplasms.[2] They are often asymptomatic although large lesions may be a cause of pelvic pain or discomfort. No age prevalence is noted. Several histological subtypes (serous, mucinous, endometrioid, clear cell, or mixed) are described according to the epithelial component. All subtypes contain various amounts of fibrous stroma. Approximately 20% of primary ovarian mucinous tumors are borderline tumors, noninvasive (intraglandular; intraepithelial) carcinomas, or invasive carcinomas; the remainder are cystadenomas.[3] Borderline variants are very rare and indistinguishable from benign lesions at magnetic resonance imaging (MRI), but, because of its malignant potential, cystadenofibromas tend to be removed surgically.[3] Because ovarian cystadenofibroma presents as a multicystic mass with solid components, preoperative differential diagnosis is important to distinguish it from malignant neoplasms. In this report, we describe the management of a 54-year-old female with an ovarian mass. The lesion was diagnosed as an ovarian cystic lesion with neoplastic etiology before surgery. After surgery, the tumour was diagnosed as a mucinous cystadenofibroma.

CASE REPORT

A 54-year-old female, P3L3 previous all vaginal deliveries, postmenopausal and a known case of hypertension, presented with abdominal distension and discomfort since 3 years. Patient had undergone contrast enhanced computed tomography (CECT) for similar complaints 2 years ago and was diagnosed with left ovarian mucinous cystadenoma of size 17×22×18 cm but did not undergo any surgical intervention for personal reasons.

On clinical examination, she had an abdominal mass of size 30×20 cm occupying entire abdomen, firm to cystic consistency, non-tender, restricted mobility, lower border of the mass not felt. On per vaginal examination, uterus not felt separately with fullness in B/L fornices. Per rectally, rectal mucosa and parametrium were free. Routine Blood test results were normal. Results of urinalysis and blood chemistry analysis were within normal ranges. Serum concentrations of the tumour markers CA-125 - 28.8 and CA19-9 - 595.1, and CEA - 8.48.

Ultrasonography (USG) abdomen and pelvis (A+P) suggestive of a well-defined thick walled hypoechoic cystic lesion measuring 22×20 cm with multiple septations arising from pelvis, could be suggestive of neoplastic etiology. MRI suggestive of a large abdominopelvic multiloculated cystic lesion (19×26×22 cm) likely arising from the adnexa with ovaries not seen separately from the lesion with multiple enhancing septae within. No enhancing solid component/mural nodules/papillary projections/calcifications seen within the lesion – features suggestive of neoplastic etiology likely mucinous cystadenoma (ORADS: III).

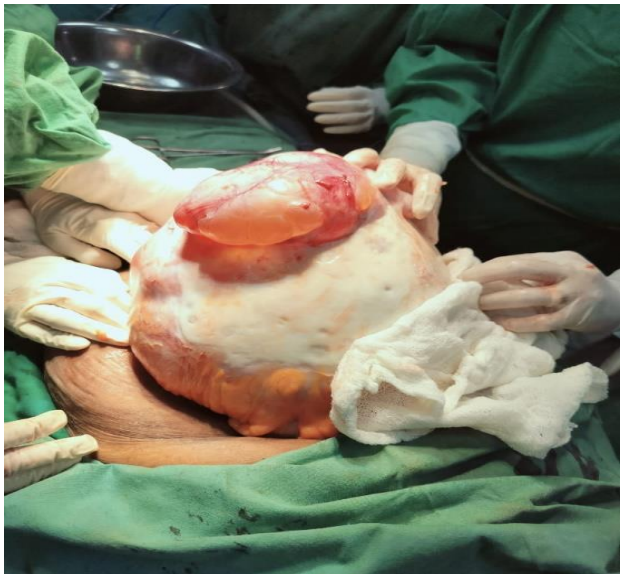

Figure 1: Intra operative picture of the mass showing its solid component.

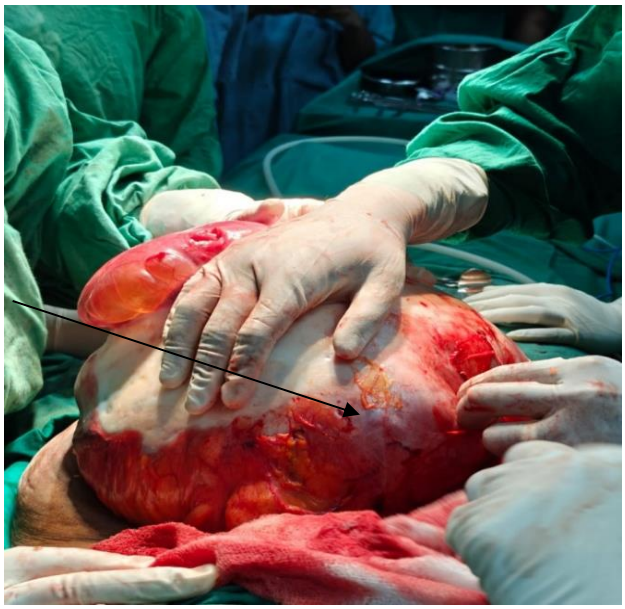

Figure 2: Intraoperative picture of the mass showing adhesions to the posterior wall of uterus (arrow showing posterior wall of uterus).

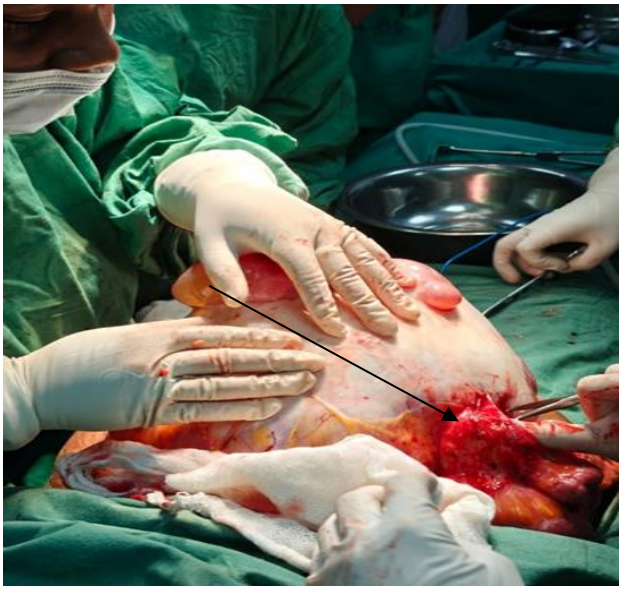

Figure 3: Intraoperative picture showing adhesion between mass and left ureter (arrow showing ureter).

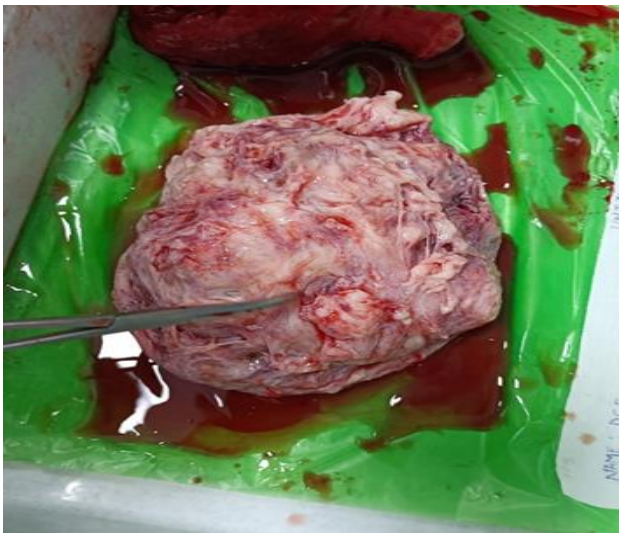

Figure 4: Excised 6.2 kg left ovarian mass.

After surgery patient was discharged on day 12 after suture removal and was advised to follow up.

DISCUSSION

Ovarian mucinous cystadenofibroma is a rare and somewhat under-recognized benign ovarian tumor. Its rarity and mixed histological composition make it a unique entity in gynecological pathology. The tumor combines features of both mucinous cystadenomas (mucin-filled cystic tumors) and fibromas (solid fibrous tissue tumors). The actual incidence of ovarian cystadenofibromas is unknown. Primary ovarian cystadenofibromas are mostly seen in women aged between 15 and 65 years.[4]

Ovarian cystadenofibroma is a type of surface epithelial tumour. These tumours show a fibrous stroma in variable

amounts in all subtypes.[5] Histological classifications is based on the type of epithelial cell present such as serous, endometrioid, mucinous, clear cell, and mixed categories.

Many ovarian mucinous cystadenofibromas are asymptomatic, especially when they are small. They may be found incidentally during imaging studies done for other reasons. Common symptoms include pelvic pain or discomfort, abdominal bloating or fullness, changes in bowel or urinary habits due to mass effect, pressure symptoms, like urinary frequency or constipation, acute abdominal pain if the tumor undergoes torsion, rupture, or hemorrhage (less common).

The diagnosis of ovarian mucinous cystadenofibroma involves a combination of clinical evaluation, imaging studies, and histopathological examination. Since this tumor is relatively rare and often presents with non-specific symptoms, it can be challenging to diagnose without surgical exploration and tissue biopsy.

On transabdominal or transvaginal ultrasound, ovarian mucinous cystadenofibromas typically appear as complex cystic masses. On computed tomography (CT) imaging, the tumor appears as a multilocular cystic mass with solid fibrous areas. CT can also identify any mass effect on adjacent structures (e.g., bladder, bowel), which can be useful for surgical planning. MRI is useful for evaluating the internal architecture of the tumor and the relationship with nearby organs. The fibromatous solid component typically appears as low-signal intensity on T2-weighted MRI images. The mucinous cystic component will have high-signal intensity on T2-weighted images due to the mucinous fluid.[6,7]

CONCLUSION

Ovarian mucinous cystadenofibromas are rare benign tumors that are often asymptomatic and may present as a pelvic mass. They consist of mucinous cystadenoma and fibromatous tissue, and treatment typically involves surgical removal. The prognosis is excellent after surgical resection, with a low risk of recurrence or malignancy.

Ovarian cystadenofibromas mimic malignant neoplasms because of their solid components and large size. Also, these tumours often have the gross appearance of a malignant tumour at the time of surgery as in our case. A frozen-section diagnosis is helpful in many of these cases because a correct diagnosis of cystadenofibroma in the operating room can save the patient from going through unnecessary extensive surgery and ensures fertility preservation. Therefore, recognition of this tumour by clinicians is of utmost importance. Ultimately, timely and precise diagnosis enhances patient care, improving both short- and long-term outcomes.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

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Cite this article as: Jain A, Kurkal N, Gupta S. Ovarian mucinous cystadenofibroma: a case report. Int J Reprod Contracept Obstet Gynecol 2025;14:665-7.