

Malignancy Look Alike: A Rare Case of Ovarian Serous Cystadeno-Fibroma; A Case Report

Dr. Pratibha Lambodari¹, Dr. Ruchi Kishore², Dr. Anshu Agrawal³, Dr. Anjum Khan⁴, Dr. Neelam Singh⁵

¹Assistant Professor, Department of Obstetrics and Gynaecology, Pt. Jawaharlal Nehru Memorial Medical College, Raipur, Chhattisgarh, India

²Professor, Department of Obstetrics and Gynaecology, Pt. Jawaharlal Nehru Memorial Medical College, Raipur, Chhattisgarh, India

³Final Year Resident, Department of Obstetrics and Gynaecology, Pt. Jawaharlal Nehru Memorial Medical College, Raipur, Chhattisgarh, India

⁴Assistant Professor, Department of Obstetrics and Gynaecology, Pt. Jawaharlal Nehru Memorial Medical College, Raipur, Chhattisgarh, India

⁵Senior Registrar, Department of Obstetrics and Gynaecology, Pt. Jawaharlal Nehru Memorial Medical College, Raipur, Chhattisgarh, India

Abstract: *Introduction:* Ovarian serous cystadeno-fibroma is a benign tumour of ovary of anonymous aetiology being a very rare tumour of ovary. This tumour mimics malignant one in its presentation as clinical finding, imaging features (MRI can differentiate it from malignant lesions) as well as gross intra operative findings. Complete surgical resection is treatment of choice with excellent prognosis. *Case:* A 49-year-old unmarried, postmenopausal for 13 years, presented with abdominal lump and vague lower abdominal pain since 1 month. On examination, an abdomino-pelvic mass reaching upto epigastrium, cystic to solid in consistency with smooth surface with mild tenderness on palpation. USG abdomen and pelvis showed large complex right ovarian cyst extending upto epigastric region, left complex ovarian cyst with minimal ascites. She underwent surgical staging with complete removal of tumour. Her post-operative period was uneventful. Histopathology revealed bilateral ovarian serous cystadeno-fibroma. *Discussion:* Adenofibromas are relatively rare tumours arising from the germinal lining and ovarian stroma. On gross examination and ultrasonography, they appear to be malignant which makes the diagnosis difficult. Differential diagnosis includes benign or malignant ovarian tumours, most likely endometrioma, ovarian epithelial lesion, tubo-ovarian abscess etc.

Keywords: serous cystadenoma, serous cystadeno-fibroma, adenofibroma, ovarian tumour

1. Introduction

Surface epithelial tumors account for more than 90% of ovarian tumors, of which serous tumors comprise 46%. Sex-cord stromal tumors constitute 8% of ovarian tumors, fibroma being the commonest, comprising 70% in this category⁽¹⁾. Serous cystadeno-fibromas of epithelial origin, benign in nature and a very slow growing tumour of anonymous etiology. It more commonly affects women in their fifth decade of life, range 15-65 years⁽²⁾, containing epithelial as well as fibrous stromal components. They represent 1.7% of all benign ovarian tumours⁽²⁾. Serous cystadenofibroma are the commonest of the adenofibromas; other variety being endometrioid, mucinous, and clear cell type⁽³⁾. The routine imaging features mimic malignant neoplasm but MRI helps in differentiating fibrous component from malignant tumours. The treatment for serous cystadenofibroma is complete surgical removal of tumour with excellent prognosis⁽⁴⁾.

2. Case Report

49-year-old unmarried, postmenopausal woman, presented to gynaecology OPD of Pt. Jawaharlal Nehru Memorial Medical College, Raipur, Chhattisgarh, India with complaints of lump in abdomen since 1 month and pain in lower abdominal since 1 month. There was no history of loss of weight or appetite. She had the history of premature

ovarian failure at the age of 36 years. She was a known hypertensive on treatment. There was no significant family history of malignancy.

On examination the patient was afebrile. She was thin built. Her abdominal examination revealed a mass of 20 × 16 cm, cystic to solid in consistency with smooth surface with restricted mobility from side to side. There was mild tenderness on palpation. Per Rectal Examination revealed the same mass probably of ovarian origin with atrophic uterus.

Bilateral complex ovarian cyst was noted on ultrasound examination, of 17.2 × 13 × 18 cm cystic mass was seen in right adnexa, extending upto epigastric region and another 4.45 × 2.75 × 3.84 cm cystic mass was noted in left adnexa with minimal ascites. She was assessed for tumour marker which showed mildly elevated Ca-125-124 U/ml, other tumour marker c CA15.3-16.33, CA19.9-19.43, CEA-1.40 were WNL. CECT (whole abdomen and pelvis) finding- right ovarian mass? Cystadenoma, right adnexal pedicle appears twisted (torsion), multi-cystic left ovary. Pap smear -HSIL with moderate dysplasia. Routine preoperative blood investigations were within normal limits. A provisional diagnosis of bilateral complex ovarian cyst was made and the patient was planned for surgical management. Exploratory laparotomy and surgical staging were done. Intra-operatively 15x12cm irregular cystic mass of right ovary, left ovary of 2x4cm irregular solid cystic mass.

Volume 11 Issue 4, April 2022

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

Staging laparotomy with Total abdominal hysterectomy with bilateral salpingo-oophorectomy with bilateral pelvic lymph node dissection with supra-colic omentectomy. Her post

operative period was uneventful and she was discharged on post operative day 10 in good health.



Figure 1 (a+b): Photograph of gross specimen of bilateral ovarian tumour with papillary projections with atrophied uterus.

Histopathological examination showed bilateral ovarian serous cystadeno-fibroma, omentum show fibrofatty tissue with mild chronic inflammatory cell infiltrate, bilateral iliac lymph node shows reactive lymphoid hyperplasia, cervix –

chronic cervicitis with benign endo-cervical polyp, endometrium atrophied. On her follow-up visit, she was doing well.

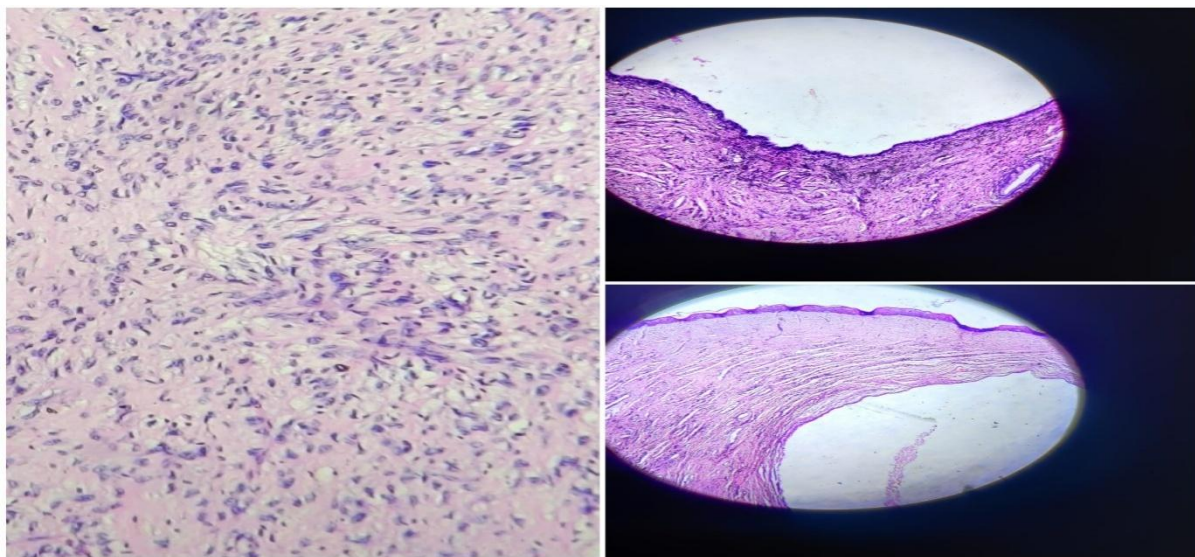


Figure 2: Histology of solid part and interface between the solid and cystic region

3. Discussion

Adenofibromas are relatively rare benign tumour with an incidence of 1.7% with extremely rare malignant potential, arising from the germinal lining and ovarian stroma⁽⁵⁾. Serous cysta-denofibroma generally present in the fourth and fifth decades of life. However, they appear to present earlier in a subset of women exposed to ante-natal diethylstilbestrol⁽⁶⁾. The diagnosis of cyst adenofibroma is a difficult one, as they macroscopically and ultrasonographically appear malignant. They are mostly well encapsulated and multiloculated, grow up to 20cms in diameter, with short broad papillary projections on surface of the cystic tumour. Differential diagnosis includes benign or malignant ovarian tumours, most likely endometrioma,

ovarian epithelial lesion, tubo ovarian abscess, para-ovarian cyst, mesenteric cyst and bladder tumour⁽⁷⁾. On ultrasonography, it may present as a unilocular cyst or a multiseptated cystic mass, with one or multiple solid nodules throughout the cystic mass. Apart from solid nodules this tumor may also show papillary projections. internal vascularity may be demonstrated in solid components. All of the above mentioned heterogenous appearance on ultrasonography can created confusion and hence reported as malignant ovarian neoplasm. In spite of all the drawbacks, ultrasonography can be used as a very good screening tool. Contrast enhanced MRI has been proved as the investigation of choice for characterizing complex ovarian solid-cystic masses. the MRI feature of cystadenofibroma was first described by Outwater et al., the solid fibrous component

appeared hypointense on T2W sequences (relative to the skeletal muscle) ⁽⁸⁾. sponge-like appearance on T2 images may also be found due to Multiple tiny hyperintense T2-signal. The fibrous nature of serous cystadeno-fibroma corresponds to Multicystic foci with thickened septae, demonstrating low-T2-signal intensity. Fibroma, fibrothecoma and Brenner tumour, which are all benign tumour are other tumour having similar appearance on MRI ⁽⁹⁾. As these tumors can resemble the gross appearance of malignant tumors perioperatively, unnecessary extensive surgery can be prevented with the use of frozen sections whenever possible.

These case needs to be reported as the patient presented with history of short duration of symptoms of abdominal lump and pain. However, it is a slow-growing epithelial tumor ⁽⁵⁾. In majority of the cases, the tumor presents as a single/multiple mass within the ovary or rarely, it can be bilateral. In this case both ovaries were involved. We report a case of a very rare combination of ovarian tumour-Fibroma with Serous cystadenoma of the ovary. Tumors with serous differentiation represent 46% of all surface epithelial stromal ovarian neoplasms of which 50% are benign serous tumors ⁽¹⁾. Sex-cord stromal tumors accounts for approximately 8% of all ovarian tumors, of which fibromas accounts for approximately half of the cases ⁽¹⁾. These tumors peak in the perimenopausal age with rarely reported malignant potentials ⁽¹⁰⁾.

The solid and cystic component of the tumour may be misdiagnosed as malignancy and mismanaged in the form of extended or radical surgery. The extended surgery lead to increased hospital stay and more morbidity. Awareness of this combination helps in avoiding such mismanagements and there complications. Because of benign nature of cyst, excision is curative. For the pathologists, it is important to correctly diagnose it as a combination tumour and not as cystic degeneration of a fibroma or as a serous cystadeno-fibroma.

4. Conclusion

We are presenting this case of Benign Serous Papillary Cystadenofibroma because of its rarity in the literature of gynaeco-pathology and also its close differential to malignant neoplasm. We are reporting this case for creating awareness among the pathologists and gynecologists about the occurrence of this rare combination of ovarian tumour so that misdiagnosis and mismanagement can be avoided ⁽⁹⁾.

References

- [1] Kurman RJ, Ellenson LH, Ronnett BM. *Blaustein's Pathology of the Female Genital Tract*. 6th ed. Springer; 2011
- [2] Czernobilsky B, Borenstein R, Lancet M. Cystadenofibroma of the ovary. A clinicopathologic study of 34 cases and comparison with serous cystadenoma. *Cancer*. 1974 Dec; 34 (6): 1971-81. Doi: 10.1002/1097-0142 (197412) 34: 6<1971.
- [3] Wolfe SA, Seckinger DL. Various anatomical types of ovarian adenofibroma. *Am J Obstet Gynecol*. 1967; 99: 121-5. Doi: 10.1016/S0002-9378 (16) 34500-8

- [4] Singh, P., Gothwal, M., Yadav, G., & Ghuman, N. (2019). Cystadenofibroma of Ovary: A Rare Case Report. *Journal of South Asian Federation of Menopause Societies*, 94-96. Doi: 10.5005/jp-journals-10032-1191
- [5] Leelavathi, Roy, P., Sree, S., & Srirama, S. (2015). Ovarian Serous Cystadenofibroma-A Rare Case Report. *Indian Journal Of Obstetrics and Gynaecology Research*, 297-299. doi: 10.5958/2394-2754.2015.00033.8
- [6] Schmidt G, Fowler WC Jr. Ovarian cystadenofibromas in three women with antenatal exposure to diethylstilbestrol. *Gynecol Oncol*. 1982 Oct; 14 (2): 175-84. Doi: 10.1016/0090-8258 (82) 90087-7.
- [7] Pande K, Santpur U, Kaur T, et al. Ovarian serous cystadenofibroma-a rare tumour. *J. Evolution Med. Dent. Sci*. 2020; 9 (10): 814-816, DOI: 10.14260/jemds/2020/176.
- [8] Outwater EK, Siegelman ES, Talerma A, Dunton C. Ovarian fibromas and cystadenofibromas: MRI features of the fibrous component. *J Magn Reson Imaging*. 1997 May-Jun; 7 (3): 465-71. Doi: 10.1002/jmri.1880070303
- [9] Wasnik, A., & Elsayes, K. (2010, november). Ovarian cystadenofibroma: A masquerader of malignancy. *Indian Journal of Radiology and Imaging*, 20, 297-299. doi: 10.4103/0971-3026.73538
- [10] Jayalakshmy, P., Poothiade, U., Krishna, G., & Jayalakshmy, P. (2012). Ovarian Fibroma with Serous Cystadenoma-An Unusual Combination: A case report. *Hindawi*, 3pages. Volume 2012 doi: 10.1155/2012/641085