CASE REPORT

Mature Cystic Teratoma In Postmenopausal Woman – A Rare Entity

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ABSTRACT
The mature cystic teratoma constitutes 20-30% of all the ovarian tumours. They are commonly seen in patients below the age of 20 years and are rarely seen in postmenopausal women. Here, we are reporting an unusual age presentation of mature cystic teratoma in a 70 year old postmenopausal female. She presented in the outpatient department with pain in lower abdomen for past 15 days. On bimanual pelvic examination, an abdominopelvic mass felt cystic in consistency, nontender in nature. MRI showed a large well defined Unilocular cystic abdominopelvic mass lesion measuring approximately 24 cm x 16cm x 9cm arising from the left ovary with multiple small cysts each measuring upto 14mm with provisional diagnosis ? cystadenoma left ovary. A total abdominal hysterectomy with left ovariectomy with b/l salpingectomy with right oophorectomy done. The histopathology report confirmed the large cyst as BENIGN CYSTIC TERATOMA. Although, the malignancy incidence is high in postmenopausal women but mature cystic teratomas can also have an unusual benign nature in postmenopausal age group as seen in our patient.

Keywords: Mature cystic teratoma, ovary, postmenopausal woman.

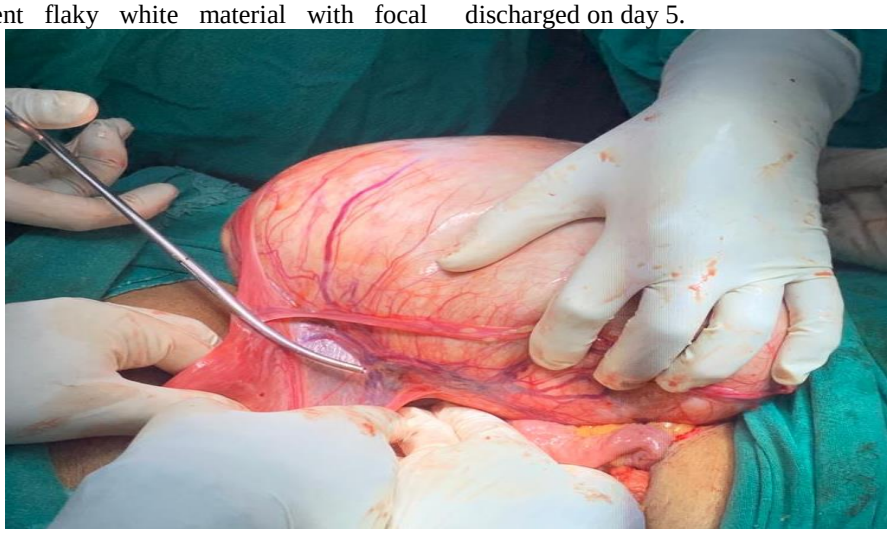
INTRODUCTION

The mature cystic teratoma is the most common variety of ovarian germ cell tumour and constitutes 20-30% of all the ovarian tumours.[1] 95% of tumours are benign cystic teratomas, also known as dermoid cysts occurring in younger women below the age of 20 years and are rarely seen in postmenopausal women.[2] Mature cystic teratomas are bilateral in occurrence in 10-15%. The incidence of malignancy is low (1-2%).[3]There are only few cases reported in retrospective descriptions of isolated cases or small series in literature. Here, we are reporting an unusual age presentation of mature cystic teratoma in a 70 year old postmenopausal female.

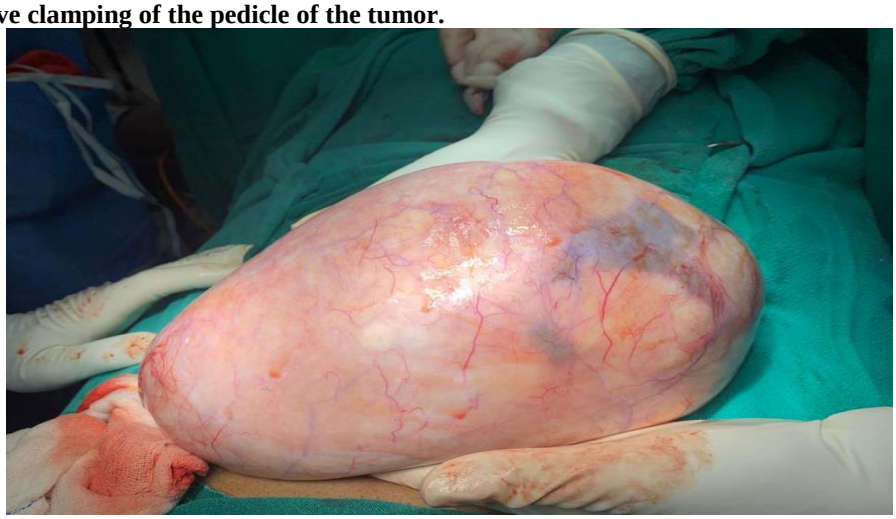
CASE REPORT

Mrs X, 70 year postmenopausal for last 20years, p5l4, she was a known case of diabetes mellitus, hypertension & pulmonary kochs on treatment, presented in the outpatient department of MMIMSR with dull aching pain in lower abdomen for the past 15 days which was non-radiating. Ultrasound done at peripheral health centre showed a big complex-abdominopelvic mass ? big Left ovarian cyst ? mesenteric cyst. *On general examination*, moderately built & well nourished. Hemodynamically stable with no lymphadenopathy. On local examination, a huge cystic, nontender mass with smooth surface and restricted mobility felt upto xiphisternum. On p/s-cervix was atrophied. On bimanual pelvic examination, an abdominopelvic mass felt cystic in consistency, nontender in nature. Uterus could not be seperately defined from the mass. No nodules felt in pouch of douglas. Rectal mucosa free on per rectal examination. Hemoglobin was 10.5gm/dl, TLC-8.5, platelets-1.26, ESR-44, RFT & LFT were within normal limits. *CA-125 was 15.25 U/*ml. Risk malignancy index$_2$-45.75. *MRI* showed a large well defined Unilocular cystic abdominopelvic mass lesion measuring approximately 24 cm x 16cm x 9cm arising from the left ovary with multiple small cysts each measuring upto 14mm with provisional diagnosis ? cystadenoma left ovary. No obvious internal septations /solid component or papillary projections seen. Right ovary atrophic. Uterus was atrophic, deviated to the right. No obvious nodal deposits were seen in pelvis or visualised in lower abdomen. No obvious peritoneal thickening was seen. Patient scheduled for Exploratory laparotomy.*Intraop findings* revealed a large oval tense cystic mass with

thick white capsule measuring approx. 26 x 15cm with a smooth surface found arising from the left ovary. The left ovarian cyst was removed. *frozen section revealed BENIGN GERM CELL TUMOUR.*The histopathology report confirmed the large cyst as BENIGN CYSTIC TERATOMA. No ascites, omentum appeared normal, hepatic surface was smooth. A total abdominal hysterectomy with left ovariectomy with b/l salpingectomy with right oopherectomy. On naked eye, an ovoid smooth cystic ovarian mass measuring 25 x 17 x 9 cm. Cut section showed a thick walled unilocular cyst filled with yellow pultaceous cheesy material. Inner surface shows adherent flaky white material with focal congested areas. No solid areas, or papillary excresences noted.MICROSCOPIC APPEARANCE: The wall of the cyst was composed of fibrocollagenous tissue showing presence of lymphoid nodules, foci of muscle tissue, melanin pigment &thick walled blood vessels.Sections examined showed a cyst lined by stratified sqaumous epithelium which was ulcerated at places & replaced by foamy histiocytes. Lumen showed keratin flakes. *No dermal appendages noted.* There was no evidence of immature neuroepithelial elements or somatic malignancy noted. Patient withstood the procedure well & made an uneventfull recovery. Patient discharged on day 5.



Intra operative clamping of the pedicle of the tumor.



Left Ovarian mass.

DISCUSSION

It was an unusual presentation of benign cystic teratoma in a 70 year old postmenopausal female.Mature cystic teratomas often termed as dermoid cyst are most common germ cell tumours of the ovary contributing to 20-30% of ovarian neoplasms. Majority of them are 5-10 cm in diameter, composed of well differentiated derivatives of three germ Layers- ectoderm, mesoderm, and endoderm.[4] Mature cystic teratomas are often seen in reproductive age group, at 20-30 years and seldom seen in postmenopausal women.[5] The Increasing levels of estrogen and progesterone may explain the increase in size of mature cystic teratoma after puberty and their arrested growth after menopause. They are often detected incidentally either during imaging or other pelvic surgeries. They have a characteristic CT scan appearance with fat or fluid level attenuation and calcification or ossification.[6] The Complications of ovarian teratoma include torsion, rupture, and infection. Chances of Malignant transformation is low accounting for 1-2% of cases, rate increases in

squamous cell carcinoma.[7]Incidently in our patient there was no evidence of malignancy. Elevated CA-125 levels point to malignancy as the menopausal women have fewer gynaecological diseases that give a false evaluation of CA-125, the test is more sensitive and specific in post-menopausal period. Calculation of Risk Malignancy Index, which is a product of ultrasound scan score, the menopausal status and the serum CA125 levels, is helpful in identifying the candidates with increased risk of malignancy and any malignancy should be managed expeditiously by staging laparotomy. In our patient the Ca-125 & $RMI_2$was normal. Malignancy of mature cystic teratoma mostly occurs in older age therefore even considering the poor tolerance of elderly patients to surgery, surgery should be expedited.

CONCLUSION

In post-menopausal women total hysterectomy with bilateral adnexectomy with frozen section is the treatment of choice. Any features of malignancy on frozen section should prompt appropriate surgical staging and further treatment for ovarian cancer.

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