Primary Ovarian Leiomyosarcoma with Metastasis: A Rare Case Report

ABSTRACT
Primary ovarian leiomyosarcoma is an extremely rare malignant smooth muscle neoplasm with less than 50 case reports in literature. We report a case of a primary leiomyosarcoma of the ovary managed at our institution.

Keywords: Adjuvant chemotherapy, Metastasis, Primary ovarian leiomyosarcoma.

How to cite this article: Anitha GS, Prathiba M, Gowri M. Primary Ovarian Leiomyosarcoma with Metastasis: A Rare Case Report. J South Asian Feder Menopause Soc 2015;3(1):29-30.

INTRODUCTION
Primary ovarian leiomyosarcomas are rare tumors with less than 50 case reports in literature.\(^1\) They comprise <3% of all ovarian tumors, most commonly affecting postmenopausal women.\(^2\) Their origin is obscure and prognosis usually poor.\(^3\) We report a case of primary ovarian leiomyosarcoma with metastasis in a young parous female.

CASE REPORT
A 24-year-old P2L2 presented to outpatient department (OPD) with pain in right lower abdomen for 3 months and difficulty in defecation for 2 months. On p/a palpation, a 10 × 10 cm firm, mobile mass was felt in right pararectal region.

On speculum examination, posterior and right lateral vaginal wall were elevated. On p/v examination, right adnexal mass 10 × 10 cm was palpated separately from uterus. Left adnexa was normal. On p/v/r examination, a 10 × 10 cm distinct, firm, mass was appreciated in right pararectal region.

Ultrasonography (USG) showed a right adnexal heteroechoic mass 10 × 8 cm. Left ovary and uterus were normal. Computed tomography (CT) abdomen and pelvis showed a right adnexal solid tumor 8 × 7 × 6 cm and another similar lesion in the ischiorectal fossa measuring 8 × 8 × 8 cm, obliterating the rectum and anal canal. There was no ascites or para-aortic lymphadenopathy. CA-125 was within normal limits.

With the above examination findings and investigation reports, a diagnosis of broad ligament fibroid was made and patient posted for laparotomy. Intraoperatively, right adnexal solid tumor of 8 × 8 × 8 cm was observed with intact capsule. Staging laparotomy was done. The mass of the ischiorectal fossa was approached through the vaginal route and surgical debulking done (Fig. 1).

The histopathological examination showed leiomyosarcoma confined to right ovary and mass of ischiorectal fossa with vimentin and SMA positive status (Fig. 2).

Patient underwent five cycles of adjuvant chemotherapy with ifosfamide and adriamycin. Patient was given second line chemotherapy with trabectedin as there was recurrence of tumor of ischiorectal fossa but showed no response. As palliative treatment diversion colostomy was advised but patient refused surgery. Patient died 1 year after chemotherapy due to extensive distant metastasis to lung, liver parenchyma and skin.
DISCUSSION

Origin of primary ovarian leiomyosarcoma is not clear as human ovary does not contain smooth muscle elements. They are aggressive tumors with poor prognosis. Survival is related to tumor stage, tumor size, grade and mitotic index. According to a review article by Taskin S et al, surgery was the first line of treatment for all previously reported cases of primary ovarian leiomyosarcoma. The extent of surgery varied from fertility-preserving operations to complete surgical staging. Following surgery, adjuvant therapy, either chemo- or radiotherapy was applied. Components of adjuvant treatment were highly variable. The authors have concluded that benefit from extensive surgery and adjuvant therapy is doubtful.

Our patient had primary malignancy confined to right ovary with intact capsule and single metastasis to ischiorectal fossa. Even though primary disease was cured by surgery, metastasis failed to respond to adjuvant therapy. Due to aggressive nature of the neoplasm and tumor spread to ischiorectal fossa at diagnosis, patient could not be cured of the disease.

CONCLUSION

Although staging primary ovarian leiomyosarcoma is according to FIGO classification for primary carcinomas of ovary, staging needs to be reviewed due to differences in the mode of spread of carcinoma and sarcoma. Due to rare nature of primary ovarian leiomyosarcoma, treatment protocol has not been defined and this needs study of larger number of cases.

REFERENCES


Fig. 2: Photomicrograph showing many bizarre tumor nuclei and multinucleate giant cells