International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Sheelaa WG et al. Int J Reprod Contracept Obstet Gynecol. 2014 Jun;3(2):466-468
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: 10.5455/2320-1770.ijrcog20140639

Case Report

Primary ovarian leiomyoma in a postmenopausal woman: a case report

Wills G. Sheelaa, Ananthi Kasinathan*

Department of Obstetrics & Gynaecology, Sri Manakula Vinayagar Medical College and Hospital (SMVMCH), Madagadipet-605107, Pondicherry, India

Received: 4 April 2014
Accepted: 14 April 2014

***Correspondence:**
Dr. Ananthi Kasinathan,
E-mail: srivatsanray@yahoo.com

ABSTRACT

Ovarian leiomyoma is a benign primary smooth muscle tumor. It is a small solid tumor commonly occurring in premenopausal women. Here we present a case of large ovarian leiomyoma in a postmenopausal woman.

Keywords: Postmenopausal, Leiomyoma ovary

INTRODUCTION

Postmenopausal women presenting with large solid ovarian tumor usually makes one suspect malignancy. In our patient unexpectedly, it turned out to be leiomyoma of ovary. This is an uncommon tumor accounting for 0.5-1% of all benign ovarian tumors. These are usually small, discovered incidentally and 80% occur in premenopausal age group.[1-5] This is a case report of primary ovarian leiomyoma in a postmenopausal woman.

CASE REPORT

A 71 year old postmenopausal woman presented to us with complaints of severe abdominal pain for a month. She noticed gradual distension of abdomen for the past 6 years. On examination she was moderately built, not emaciated. There was generalized distension of the abdomen. On palpation there was a large abdominal mass of 24 weeks gravid uterus size. On bimanual examination, atrophic uterus was felt separately; a firm mass of 24 weeks gravid uterus size was felt in close proximity to the fundus of uterus. Same mass was felt on rectal examination and rectal mucosa was free. USG, CT Scan and MRI showed a large abdominopelvic mass of size 15 x 12 cm in continuity with uterus. Right ovary and uterus were atrophic. No ascites or peritoneal deposits were noted. A provisional diagnosis of fibroid uterus/ ovarian tumour was made. CA-125 was within normal limits. Exploratory laparotomy was done. Uterus and right ovary were atrophic. Left ovary was enlarged to 15 x 12 cm, firm in consistency, white in colour, encapsulated, mobile, with prominent veins over the capsule and the fallopian tube stretched over it. There were no excrescences, deposits, or adhesions. The pedicle was twisted twice and had tortuous veins. Omentum, paracolic gutters, PODS, ascending, descending colon, undersurface of liver and spleen were normal. Total abdominal hysterectomy, left salpingo ovariotomy and right salpingo-oophorectomy was done. Post-operative period was uneventful. She was discharged on the 9th post-operative day.

Grossly, the tumor weighed 950 gm. The left ovarian mass with fallopian tube measured 14 x 13 x 10 cm with nodular external surface and focal congested areas (Figure 1). Cut section showed grey white solid areas with whorled appearance (Figure 2). One area showed compressed ovarian tissues within the capsule. Fallopian tube measured 5 cm. Microscopically the tumor was composed of bundles and fascicles of benign smooth muscles cells with extensive hyalination, myxoid change and edema (Figure 3, 4). No atypia or mitotic activity was seen. Compressed ovarian stroma was seen at the

periphery of the tumour. Capsule surface showed papillary mesothelial hyperplasia.

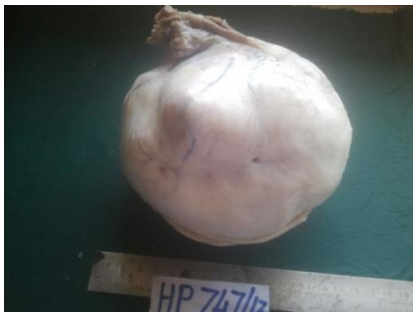

Figure 1: The left ovarian mass with fallopian tube measuring 14 x 13 x 10 cm with nodular external surface.

Figure 2: Cut section showing grey white solid areas with whorled appearance.

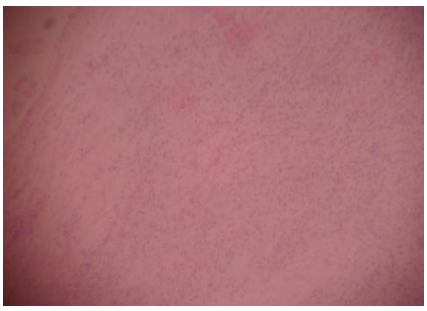

Figure 3: Microscopy of tumor showing bundles and fascicles of benign smooth muscles cells (H&E x100).

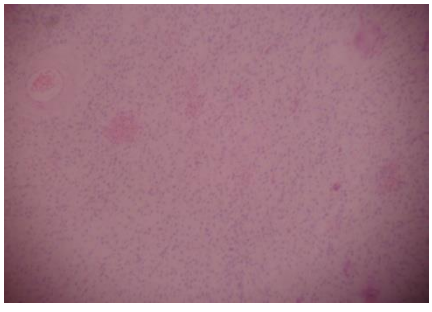

Figure 4: Microscopy of tumor showing bundles and fascicles of benign smooth muscles cells with extensive hyalination and myxoid changes (H&E x100).

DISCUSSION

Ovarian leiomyoma occur in the age group of 20 to 65 years.[6] About one sixth of cases occur after menopause. They are usually small and unilateral[6].

Leiomyoma of uterus is a very common entity unlike ovarian leiomyoma. Diagnostic features of ovarian leiomyoma are its typical whorled appearance on cut surface, bundles of smooth muscle cells and presence of ovarian cortex within the capsule. They probably arise from smooth muscle cells in the ovarian hilar blood vessels, ovarian ligament, smooth muscle cells or multipotential cells in the ovarian stroma, undifferentiated germ cells or by cortical smooth muscle metaplasia.[2,3,6]

About 60 cases have been reported in literature.[1,6] Usually they are asymptomatic and in symptomatic cases, they present with abdominal pain, palpable mass, hydronephrosis, elevated CA-125, hydrothorax and ascites.[3,7-9] Our patient had presented with only abdominal pain and a palpable mass.

Uterine leiomyomas and adenomyosis have been diagnosed concomitantly with ovarian leiomyoma by some authors.[1,10] Ovarian leiomyomas showing hyaline degeneration and myxomatous changes have also been reported.[2,3,6,11] There are case reports were the ovarian tumor was found to be adherent to bowel loops.[11,12] Immunohistochemical staining of the tumor cells shows positivity for smooth muscle actin and desmin.

It is important to differentiate this from ovarian fibroma-thecomas, cellular fibromas, sclerosing stromal tumors, leiomyomas arising from broad ligament extending into hilum of ovary and uterine leiomyomas becoming parasites on the ovary(wandering leiomyomas).[1,6,10] Since these tumors have a benign course, they are treated by complete resection.

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

REFERENCES

1. Lerwill MF, Sung R, Oliva E, Prat J, Young RH. Smooth muscle tumours of the ovary: a clinicopathologic study of 54 cases emphasizing prognostic criteria, histologic variants, and differential diagnosis. Am J Surg Pathol. 2004;8:1436-51.
2. Murakami M, Uehara H, Nishimura M, Iwasa T, Ikawa H. A huge ovarian smooth muscle tumour: a case report. J Med Invest. 2010;57:158-62.
3. Wei C, Lilic N, Shorter N, Garrow E. Primary ovarian leiomyoma: a rare cause of ovarian tumour in adolescence. J Pediatr Adolesc Gynaecol. 2008;21:33-6.

4. Kurai M, Shiozawa T, Noguchi H, Konishi I. Leiomyoma of the ovary presenting with Meigs' syndrome. J Obstet Gynaecol Res. 2005;31:257-62
5. Safaei A, Khanlari M, Azarpira N, Monabati A. Large ovarian leiomyoma in a postmenopausal woman. Indian J Pathol Microbiol. 2011;54:413-4.
6. Ramalakshmi Pullela VB, Das S, Chunduru B, Dua S. A case of ovarian leiomyoma with cystic degeneration. Indian J Pathol Microbiol. 2009;52:592-4.
7. Tomas D, Lenicek T, Tuckar N, Ledinsky M, Kruslin B. Primary ovarian leiomyoma associated with endometriotic cyst presenting with symptoms of acute appendicitis: case report. Diagn Pathol. 2009;4:25.
8. Khaffaf N, Khaffaf H, Wuketich S. Giant ovarian leiomyoma as a rare cause of acute abdomen and hydronephrosis. Obstet Gynaecol. 1996;87:872-3.
9. Nicoll JJ, Cox PJ. Leiomyoma of the ovary with ascites and hydrothorax. Am J Obstet Gynaecol. 1989;161:177-8.
10. Tsalacopoulos G, Tiltman AJ. Leiomyoma of the ovary: a report of 3 cases. S Afr Med J. 1991;11:574-6.
11. Agrawal R, Kumar M, Agrawal L, Agrawal K. A huge primary ovarian leiomyoma with degenerative changes - an unusual. J Clin Diagn Res. 2013;7(6):1152-4.
12. Jena A, Patnayak R, Vijayalaxmi B, Laxmi AY. Primary ovarian leiomyoma: an uncommon entity - case report and a brief review of literature. J Basic Clin Reprod Sci. 2013;2:54-6.

DOI: 10.5455/2320-1770.ijrcog20140639
Cite this article as: Sheelaa WG, Kasinathan A. Primary ovarian leiomyoma in a postmenopausal woman: a case report. Int J Reprod Contracept Obstet Gynecol 2014;3:466-8.