

Original Research Paper

Medical Science

A Case Report of Primary Ovarian Leiomyoma

Dr.RishuVidhatriPost graduate student,Department of Pathology,RIMS,Ranchi-834009Dr.R.K.Srivastava(Professor)Dr.Ratna
Choudhary(Professor)

ABSTRACT

Primary ovarian leiomyoma is a rare benign tumor of ovary.We report here a case of ovarian leiomyoma in a 70 year old women who presented with chief complaint of lower abdominal pain.

KEYWORDS: ovary, leiomyoma, immunohistochemical staining

INTRODUCTION-

Leiomyoma is a benign smooth muscle tumor that most commonly affects the uterus,cervix and broad ligaments in women of reproductive age group.Primary ovarian leiomyoma is a rare benign tumor of the ovary.It accounts for 0.5-1% of all the benign ovarian tumor.Most commonly seen in woman between 20 and 65 years of age.Ovarian leiomyoma are predominantly unilateral.The majority of patients are discovered incidentally with about 80%cases occurring in pre menopausal women.However in our case patient was post menopausal and presented with chief complaint of lower abdominal pain.

CASE PRESENTATION-

We present a case of unilateral ovarian leiomyoma in a post menopausal women of age 70year.Patient presented with chief complain of lower abdominal pain.Ultrasonography revealed right complex ovarian cyst.Hysterectomy with B/L salpingo-oopherectomy was done.Grossly ovary measured 14*9*5cm with a large cyst measuring 10*8*6cm filled with serous fluid and a mass was attached to the upper end of cyst, histological examination of which revealed interlacing bundles of smooth muscle cell resembling leiomyoma.There was no atypia,pleomorphism and mitotic figure and necrosis was absent. The diagnosis of ovarian leiomyoma was confirmed by immunohistochemical staining which showed strong and diffuse positive staining for smooth muscle actin.There was no significant pathology in uterus and cervix showed chronic cervicitis with mild dysplasia.

DISCUSSION-

Primary ovarian leiomyoma is a very rare benign tumor of ovary usually detected incidentally during routine pelvic examination or during surgery. Most patient are asymptomatic or have only complaints of lower abdominal pain. Giant ovarian leiomyoma however can present with ascites, hydrothorax, hydronephrosis or slightly elevated levels of tumor marker CA-125.

Ovarian leiomyoma are predominantly unilateral but bilateral cases have been reported in pediatric and young adult patient.

Ovarian leiomyoma probably arise from smooth muscle cells in ovarian hilar blood vessels, smooth muscle cells or multipotent germ cell in ovarian stroma and cortical smooth muscle metaplasia. Estrogen may play a role in development of ovarian leiomyoma or it can arise in developmentally abnormal ovaries.

Ovarian leiomyoma can be primary or associated with uterine leiomyoma. But sometimes a subserosal pedunculated uterine leiomyoma can loose its attachment from uterus and connect to the ovary. This had not occurred in our case because the uterus was normal and did not exhibit any signs of leiomyoma.

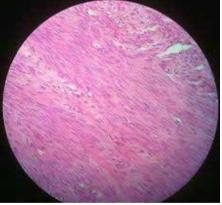
The correct diagnosis of an ovarian leiomyoma requires identification of smooth muscle nature of tumor. In our case immunohistochemical

staining with SMA confirmed the diagnosis. The coma can be considered in differential diagnosis but it does not express SMA. Ovarian leiomyoma must also be differentiated from leiomyosar coma for which cytological atypia, mitotic count and necrosis is considered. In our case none of these feature was detected.

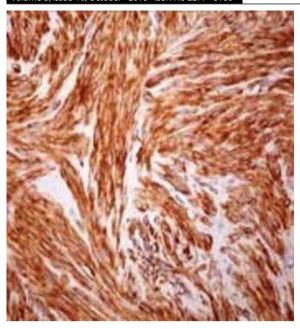
A common surgical approach is hysterectomy with bilateral salpingo-oopherectomy as done in our case. However unilateral or bilateral salpingo-oopherectomy can be considered in young patients.

CONCLUSION-

The present study presents a rare case of primary ovarian leiomyoma. Pre operative diagnosis can be difficult with solid ovarian tumor, histopathological and immunohistochemic alanalysis is required for definitive diagnosis.







REFERENCES:

- Agrawal R., Kumar M., Agrawal L., Agrawal K.K. A huge primary ovarian leiomyoma with degenerative changes: an unusual. J Clin Diagn Res. 2013;7(6):1152–1154. [PubMed]
- Blue N.R., Felix J.C., Jaque J. Primary ovarian leiomyoma in a premenarchal adolescent: first reported case. J Pediatr Adolesc Gynecol. 2013 pii:51083-3188(13)00242-8. [Pu-bMed]
- Tomas D., Lenicek T., Tuckar N., Puljiz Z., Ledinsky M., Kruslin B. Primary ovarian leiomyoma associated with endometriotic cyst presenting with symptoms of acute appendicitis: a case report. Diagn Pathol. 2009;4:25.[PubMed]
- Khaffaf N., Khaffaf H., Wuketich S. Giant ovarian leiomyoma as a rare cause of acute abdomen and hydronephrosis. J Obstet Gynecol. 1996;87:872–873. [PubMed]
- Erdemoglu E., Kamaci M., Bayram I., Güler A., Güler Sahin H. Primary giant leiomyoma of the ovary: case report. Eur J Gynaecol Oncol. 2006;27(6):634–635. [PubMed]
- Güney M., Ozsoy M., Oral B., Mungan T., Kapucuoğlu N. Unilateral primary ovarian leiomyoma in adolescent: a case report. Arch Gynecol Obstet. 2007;275(June (6)):507– 510. [PubMed]
- Wei C., Lilic N., Shorter N., Garrow E. Primary ovarian leiomyoma: a rare cause of ovarian tumor in adolescence. J Pediatr Adolesc Gynecol. 2008;21(1):33–36. [PubMed]
- Lim S.C., Jeon H.J. Bilateral primary ovarian leiomyoma in a young woman: case report and literature review.Gynecol Oncol. 2004;95(3):733–735. P