

## Multiple and bilateral benign cystic teratomas of ovary with broad ligament leiomyoma: a case report

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### ABSTRACT

**Background:** Benign cystic teratoma is the most common tumor of ovary. Though bilateralism is seen in 10-15% of the cases, bilateral and multiple benign cystic teratomas are rare and very few cases have been reported in the literature. **Aim:** We present a case of bilateral and multiple benign cystic teratomas with a broad ligament leiomyoma. **Case findings:** A 38 –year- old female presented with lower abdominal pain of 5 months duration. Ultrasonography of abdomen showed bilateral multiple adnexal cystic masses with multiple hyper-echoic solid components. Laparoscopy was done. There were bilateral tumors, two on right side and three on left side. Posterior surface of the uterus showed a fibroid. Ovarian cystectomy and myomectomy was done under general anesthesia with preservation of both ovaries. Report of bilateral and multiple benign cystic teratomas with broad ligament fibroid was given. **Conclusion:** When teratomas are multiple and bilateral, recurrence in the form of a dermoid cyst (3%) or immature teratoma (2-2.6%) in the residual ipsilateral ovary is most frequent. Due to the rarity and increased recurrence rate, we are presenting this case.

**Key words:** Ovary, tumors, benign, cystic, teratoma, leiomyoma

### INTRODUCTION

Tumors of the ovary are common form of neoplasm in women.<sup>[1]</sup> World Health Organization's histological classification separates ovarian neoplasm according to the most probable tissue of origin, from one of the three ovarian components: surface epithelial tumors, sex cord stromal tumors and germ cell tumors.<sup>[2]</sup> Among the three main groups, epithelial tumors are the most common comprising of 58% of the all ovarian tumors. Benign

cystic teratoma, a germ cell tumor is the most common comprising of 32% of all ovarian tumors.<sup>[3]</sup> Even though bilateralism is seen in 10-15% of the cases, bilateral and multiple ovarian benign cystic teratomas are rare. Very few cases are reported in the literature.<sup>[4]</sup>

### CASE REPORT

A 38 year old female had lower abdominal pain of 5 months duration. It was mild dull aching situated at

lower abdomen. Also complained of epigastric pain, retrosternal burning sensation and nausea of 2 months duration. Aggravated during empty stomach and relieved after taking food. No radiation or referred pain. Not associated with vomiting, constipation or bleeding. Pre-operative antacid treatment relieved the epigastric pain. Clinical examination was normal. Routine investigations showed hemoglobin of 12.8 gm%, Total WBC count of 7,600/cmm, Differential count of neutrophils:68%, lymphocytes:29%, monocytes:02%, eosinophils:1%. ESR:22 mm/1<sup>st</sup> hour. HIV and HBsAg were negative.

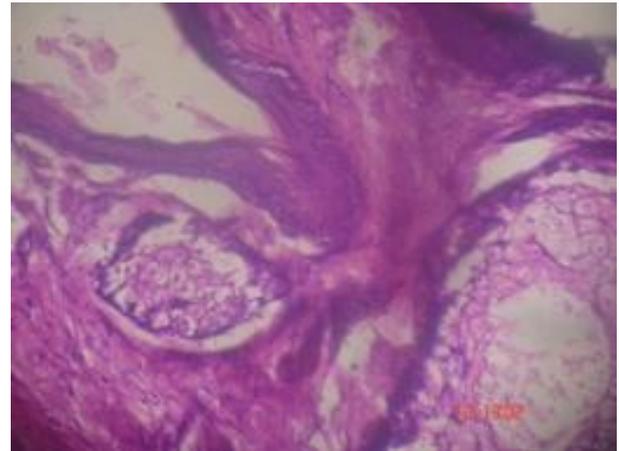
Ultrasonography of abdomen showed bilateral multiple adnexal cystic masses with multiple hyper-echoic solid components. Laparoscopic ovarian cystectomy and myomectomy was done under

general anesthesia. There were bilateral tumors, two on right side and three on left side. Gross specimen showed multiple cystic gray white bits larger measuring 4x3x3 cms.

Cut section showed cysts filled with pultaceous material and hairs. There were Rokitansky protuberances. One of the nodules was fibroid measuring 3x2x1 cms. Cut section was gray white and firm with whorled areas [Figure 1]. Microscopy from all five cysts showed stratified squamous, columnar epithelium, sebaceous glands, fibrofatty tissue and cartilage [Figure 2]. Fibroid showed spindle cells arranged in interlacing bundles and fascicles. Report of bilateral and multiple benign cystic teratomas with broad ligament fibroid was given.



**Figure 1: Gross appearance of five cystic gray brown, benign cystic teratomas and single gray white and firm, leiomyoma.**



**Figure 2: Microscopic picture showing stratified squamous epithelium, sebaceous glands and fibrofatty tissue.**

## DISCUSSION

The word teratoma is derived from Greek 'teras' which means the 'Monster' coined by Virchow.<sup>[5]</sup> Teratomas are classified into three groups as mature, immature and monodermal teratomas. Most of the teratomas have 46xx karyotype and thought to develop by parthenogenesis from a single haploid germ cell.<sup>[6]</sup> Most of these tumors are found in the age group of 20-50 yrs.<sup>[7]</sup> and 5-20% in postmenopausal women.<sup>[8]</sup> They are cystic and rarely solid derived from one or more of the embryonic germ layers, ectoderm, endoderm and mesoderm. Mature cystic teratomas account for 27-44% of all the ovarian tumors and up to 58% of the

benign tumors.<sup>[9]</sup> Most of the cystic teratomas present with a mass, but at least 25% are discovered incidentally.<sup>[10]</sup> Size of these tumors varies from 0.5-40 cms with smooth external surface and is filled with sebaceous material and hairs. A nodule composed of fat tissue with teeth and bone protrudes into the cyst and is called as Rokitansky protuberance. Recent WHO fascicle has described the following complications- torsion of the pedicle in 10-15 % of the cases, tumor rupture in 1% of cases, infection of the tumour in 1% of cases and hemolytic anemia in rare cases.<sup>[2]</sup> The present case was presented with the lower abdominal pain. There were bilateral and multiple

tumors, two on right side and three on left side. Posterior surface of the uterus showed a fibroid.

## CONCLUSION

When the benign cystic teratomas are multiple and bilateral, recurrence in the form of a dermoid cyst (3%) or immature teratoma (2-2.6%) in the residual ipsilateral ovary are most frequent.<sup>[11,12]</sup> Even though it is benign tumor, because of these complications close follow up of patients is required.

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**Conflict of Interest:** None declared