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**Pathology**

# Germ Cell Tumour of Ovary – Bilateral Benign Cystic Teratoma- A Rare Case Diagnosed in Histopathology

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**Abstract** **Original Research Article**

A 35-year-old female patient, presented with moderate to severe abdominal pain. Ultrasonography revealed the presence of bilateral cystic lesions. The right side ovary measured 7x5x2 cm and left side measured 4x3x2cm. On histopathology Sections from both ovary: H&E stained section shows ovarian stroma with squamous lining epithelium, sebaceous glands, cartilage, fat lobules, muscular tissue along with plenty of thyroid follicles. Findings are suggestive of "GERM CELL TUMOR OF OVARY - BILATERAL BENIGN CYSTIC TERATOMA".

**Keywords:** Bilateral, benign cystic teratoma.



## INTRODUCTION

Ovarian tumors are a common neoplasm in women. The mature cystic teratoma makes up almost 20% of ovarian neoplasm [1]. Incidence of bilateral ovarian teratoma is 2.2-3%. Teratomas are classified as either mature or immature types and are often composed of multiple embryologic layers. While the mature type is benign, the immature type is benign with a more aggressive course [2].

## CASE REPORT

A 35-year-old female patient, presented with moderate to severe abdominal pain. On examination, the patient was ill-looking, but her vital signs were stable. Her complete blood count was within the normal range. Ultrasonography revealed the presence of bilateral cystic lesions. The right side ovary measured 7x5x2 cm and left side measured 4x3x2cm. There were no other findings in the abdominal organs.

## GROSS EXAMINATION OF RECEIVED SPECIMEN

A hysterctomised specimen of uterus with cervix with bilateral attached ovary with fallopian tube is received. Uterus measures 10x6x4cm on cut section uterine wall thickness is 2cm and endometrial thickness is 0.5mm. Cervix is whitish shiny.

Right ovary: 7x5x2cm sized ovary attached with fallopian tube is received. Outer surface is smooth shiny capsulated. On cut section it shows solid and cystic areas. Cyst of size is 6X5cm. On cutting dirty cheesy material comes out.

Left ovary: 4x3x2cm sized ovary attached with fallopian tube is received. Outer surface is smooth shiny capsulated. On cut section it shows solid areas with multiple cyst of size varying from 0.2x0.2 to 2.5x1.5cm. On cutting cheesy material with hair comes out. At places there are hard areas.

**Fig-1: Specimen of uterus with cervix with bilateral ovary and fallopian tube**

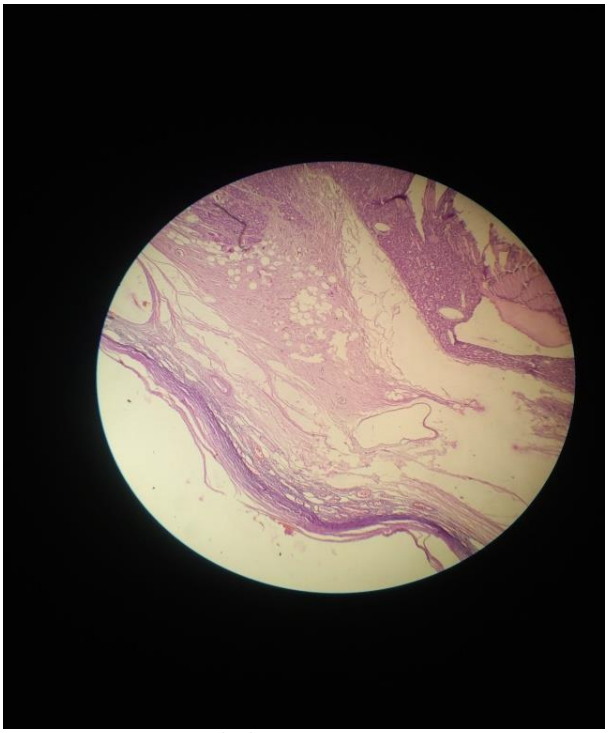

**Fig-2: Microscopy of left ovary: epithelial lining, sebaceous glands, cartilage and fat**

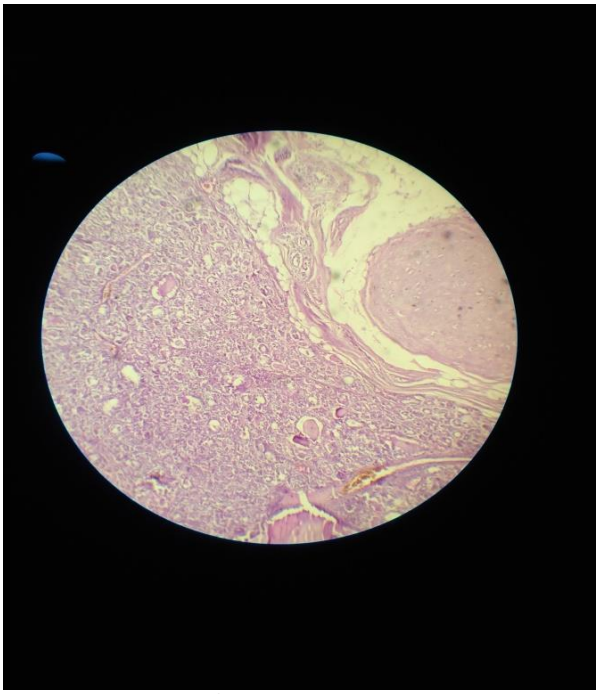

**Fig-3: Microscopy of right ovary: epithelial Lining, thyroid follicles, fat lobules**

## MATERIAL AND METHOD

Sections are taken from a hysterectomised specimen of uterus with bilateral ovary and block were done after tissue processing. Blocks were cut by microtome and slides were stained by H and E stain then examined under light microscope.

# RESULT

**HISTOPATHOLOGY**

Sections from endometrium, cervix and fallopian tube shows no remarkable pathology.

Sections from both ovary: H&E stained section shows ovarian stroma with squamous lining epithelium, sebaceous glands, cartilage, fat lobules, muscular tissue along with plenty of thyroid follicles.

Findings are suggestive of "GERM CELL TUMOR OF OVARY - BILATERAL BENIGN CYSTIC TERATOMA".

# DISCUSSION

The word teratoma is derived from teras, the Greek word meaning monster, coined in the first edition of Virchow's book on tumors published in 1863 [4]. They are classified into mature, immature, and monodermal types. Most have a 46XX karyotype and are thought to develop by parthenogenesis from a single haploid germ cell [5]. The peak incidence is found in women of reproductive age (20–40 years) although it occurs in patients of almost any age [6].

Mature cystic teratomas account for 58% of benign ovarian tumors and up to 44% of all ovarian tumors [7]. They are usually unilateral with approximately 8–15% bilateral [8] and ipsilateral multiple ovarian teratomas were found in 9% of separate pathologic reviews [3, 9-12].

Lower abdominal pain is the most common symptom in cystic teratomas (44.1%). Torsion is the most common complication.

# CONCLUSION

At the end of study the rare case of ovary is diagnosed by histopathology. So, the overall finding suggestive of “GERM CELL TUMOR OF OVARY - BILATERAL BENIGN CYSTIC TERATOMA".

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