



## A RARE CASE OF LARGE SOLITARY LUTEINISED FOLLICULAR CYST OF PREGNANCY AND PUERPERIUM

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**Abstract:** We are presenting a case of large solitary luteinized follicular cyst of pregnancy and puerperium [LSLFCPP] that presented in the postpartum period.

**Keywords:** Large Solitary Luteinised Follicular Cyst, Puerperium.

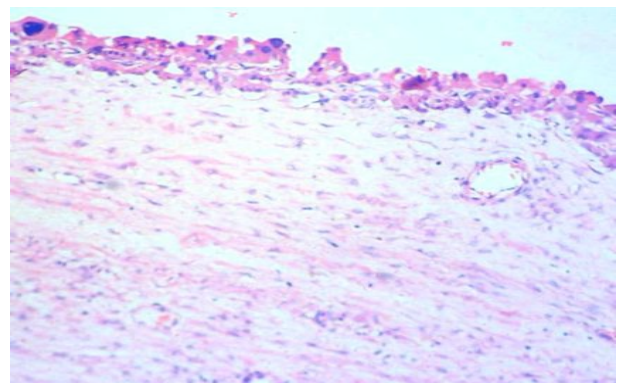
### INTRODUCTION

A 27-year-old lady was referred to our casualty with complaints of persistent abdominal distension after delivery. She had delivered an intrauterine dead baby 51 days prior, at 28 weeks of gestation. She was a para 3 lady with two full term normal deliveries. Her antenatal period in the present pregnancy was uneventful except that an ultrasound scan done at 28 weeks gestation showed an adnexal mass. On abdominal examination, there was a cystic mass of about 26 weeks size, with smooth surface and lower border not palpable. On pelvic examination, the mass was felt separate from the uterus. On ultrasound examination, there was a clear cyst in the pelvis extending above the umbilicus to both sides. There was no evidence of solid areas septations or internal vascularity. Left ovary could not be made out separately, right ovary was normal. Her CA-125 value was 7.7 and rest of the investigations was normal.

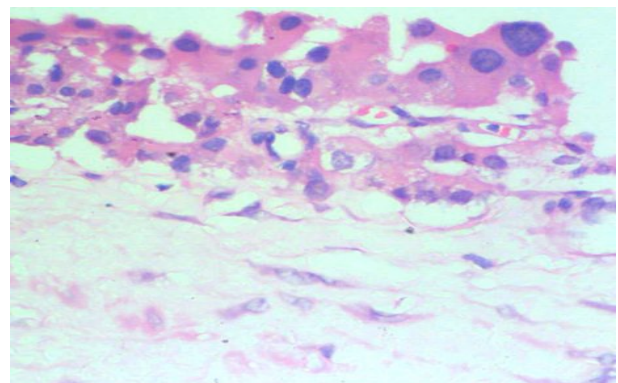
She was posted for surgery in view of the huge mass. Intraoperatively, there was a large unilocular cyst of about 15\* 10 cm arising from the right ovary. Right ovariectomy was done. Postoperative period was uneventful. The histopathological report came as large solitary luteinizing follicular cyst of pregnancy and puerperium.



Cyst Lining With Bizarre Nuclei



High Power View



Gross inspection of the specimen revealed a unilocular brown mucoid filled cyst measuring 15\*10cm. Microscopic examination showed that the cyst was lined by luteinized cells with focal large nuclei, scattered nests of luteinized cells in the oedematous fibrous wall and reticulin fibers surrounding large nests of lesional cells.

### DISCUSSION

Ovarian tumors and tumor like masses during pregnancy are uncommon. Most neoplasms are benign, and about 4% are malignant. Tumor-like lesions include pregnancy luteoma, hyper reactioluteinalis, intra

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follicular granulosa cell proliferation; hilus cell hyperplasia, ectopic decidua and large solitary luteinized follicle cyst of pregnancy and puerperium [LSLFCPP]. LSLFCPP is a benign tumor. It is of particular interest because of its enormous size and confusion with neoplasms. LSLFCPP is a rare lesion; only about 10 cases have been reported in the literature. The pathogenesis of LSLFCPP is unclear. Its occurrence during pregnancy suggests a role of hcg. This association is supported by the presence of numerous cystic follicles. The literature has described several cases of LSLFCPP occurring late in the puerperium when hcg levels are low. Although lined by luteinized cells, the cyst is unlikely to originate from a corpus luteum. The presence of reticulin fibers around groups of lesional cells supports a granulosa cell origin from a follicle.

The major differential diagnoses include the unilocular cystic granulosa cell tumors of both the adult and juvenile types. Although LSLFCPP is indistinguishable grossly from unilocular cystic granulosa tumor, they differ in microscopic features. Unlike LSLFCPP that

show luteinized cells with focal bizarre nuclei, adult granulosa cell tumor is composed of a monotonous population of granulosa cells usually without luteinisation and bizarre nuclei. Further more, nuclear grooves and Call-Exner bodies are seen in granulosa cell tumor but not in LSLFCPP. Juvenile granulosa cell tumor is mitotically active while LSLFCPP shows absent to occasional mitotic figures.

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