

# Laparoscopic Management of Giant Ovarian Cyst : A Case Report

<sup>1</sup> Kadek Agus wijaya, <sup>2</sup> Ni Made Youthma Dwistayani

<sup>1</sup> Consultant Fertility Reproductive Endocrinology Division of Obstetrics and Gynecology,

<sup>2</sup> Internship Doctors of Obstetrics and Gynecology Division,  
Tabanan Regional General Hospital, Tabanan, Bali, Indonesia.

**Abstract:-** An ovarian cyst is a sac filled with fluid or semisolid material that grows in the ovary. Giant ovarian cysts are ovarian cysts with a diameter of more than 10 cm. Dermoid cysts on the ovaries are cysts that often occur in reproductive age but can occur at any age. A 25-year-old woman comes with complaints of lower left abdominal pain that has been felt since 6 months ago. On physical examination, the abdominal mass was palpable at the level of the navel and was movable. The patient underwent ultrasound examination: there was a well-defined hypochoic mass and the size was not reachable by the probe. Subsequently, the patient underwent a CT-scan with contrast and a well-defined mixed-density mass with a size of 16.79 cm x 13.04 cm was found. The patient then underwent a laparoscopic salpingo-oophorectomy. After surgery, the patient was diagnosed with left ovarian dermoid cyst, further anatomical pathology examination was carried out which the results stated that there were no immature cells, which means that the dermoid cyst is benign so the prognosis is ad bonam.

**Keywords:-** Ovarian Cyst, Giant Ovarian Cyst, Dermoid Cyst, Salpingo-Oophorectomy, Laparoscopy.

## I. INTRODUCTION

An ovarian cyst is a sac filled with fluid or semisolid material that grows in the ovary.<sup>1</sup>

Giant ovarian cyst is a cyst that grows in the ovary with a diameter of more than 10 cm. Cases of Giant ovarian cysts are now rare because of the increasing modalities for making the diagnosis.<sup>2</sup>

Ovarian cysts were found when the patient underwent ultrasound examination, both abdominal and transvaginal and transrectal.<sup>3,4</sup>

Dermoid cysts are the most common tumors (10% of total ovarian tumors) originating from germ cells. Dermoid cysts are generally diagnosed at the time of reproductive age but can occur at any age and in 10% of cases are bilateral. Complications of dermoid cysts can be torsion, rupture, bleeding and can turn malignant.<sup>1,5</sup>

## II. CASE REPORT

A 25 year old woman who was sent from an obstetrician came to the Gynecology Polyclinic of Tabanan Hospital with complaints of left side abdominal pain since 6 months ago, abdominal pain felt like twisting, the stomach also felt enlarged, the patient did not lose weight. The patient had gone to the obstetrician and was told that there was a cyst in the ovary and an operative laparoscopy was planned.

From general examination, he was compos mentis consciousness, blood pressure: 110/70 mmHg, pulse 80 times/minute, breath 20 times/minute. On physical examination, there was a palpable mass at the center of the abdomen and was movable. Gynecological examination revealed no abnormalities.



Fig 1:- Clinical features of the patient, the size of the mass at the level of the navel.

The results of laboratory examinations showed hemoglobin levels of 11.4 g/dL, hematocrit 35.3%, leukocytes  $6.8 \times 10^3$  uL, platelets  $246 \times 10^3$  uL.

Ultrasonography was performed on the patient and a hypochoic mass was found and the impression was that there was a solid mass, the size of the cyst was not reachable by the probe.

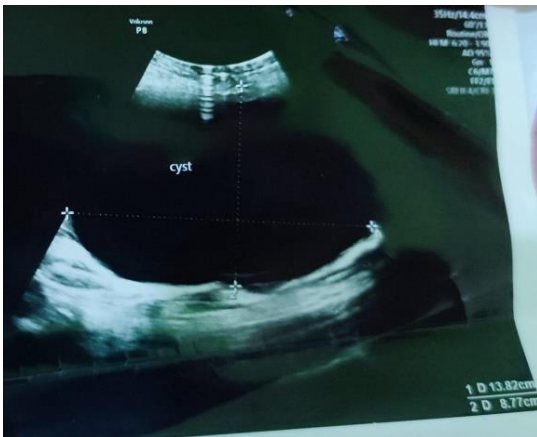


Fig 2:- Ultrasound image of a well-defined hypoechoic mass.

The patient underwent a CT scan of the abdomen with contrast and a well-defined mixed-density extraluminal mass (dominantly solid) with a size of 16.79 cm x 13.04 cm x 13.39 cm in the abdominal region and pelvic cavity showed heterogenous contrast enhancement on contrast. The mass seemed to press the intestines laterally and anteriorly, seemed to stick to the intestinal wall.



Fig 3:- CT scan of the abdomen with contrast

The patient was diagnosed with a giant ovarian cyst, then a laparoscopic salpingo-oophorectomy was performed. At the time of operative laparoscopy, a cystic mass from the left ovary was seen which was adhesion to the peritoneum so that adhesiolysis was performed, the right ovarian tube was found to have adhesions, so fimbrioplasty was performed. After surgery, the patient was diagnosed with a left dermoid cyst due to the presence of hair, cartilage and fat. After surgery, the patient's hemodynamic condition was stable, the patient went home after 1 day of treatment in the hospital.



Fig 4:- Left Dermoid Cyst Macroscopic Appearance. Looks hair, fat and cartilage.

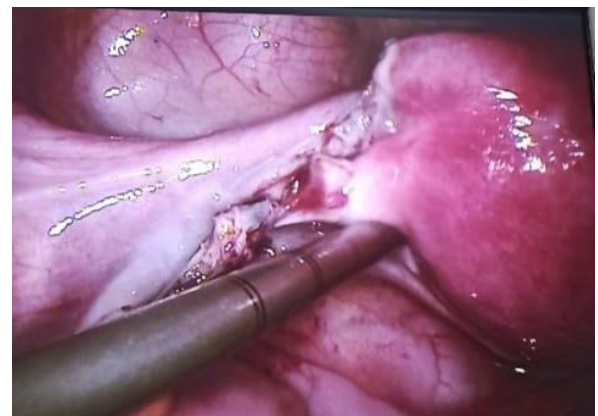


Fig 5:- Post operative laparoscopic left salpingo-oophorectomy.

### III. DISCUSSION

In this case , a 25 year old patient was admitted to the hospital with complaints of pain in the left side of the abdomen , which was accompanied by an enlarged abdomen in the last 6 months . On physical examination, a movable mass at the level of the navel was found. History and physical examination are in accordance with the theory regarding ovarian cysts. Ovarian cysts, especially dermoid cysts or mature teratoma, often occur in reproductive age. In most cases, patients do not feel any complaints, and are usually found incidentally during physical examination or ultrasound. The pain will increase if the cyst is twisted or ruptures. There is also a feeling of fullness in the stomach. Pressure on surrounding devices can cause discomfort, micturition and defecation disorders.<sup>5,6</sup>

The ultrasound results revealed a hypoechoic mass and the impression was that there was a solid mass, the size of the cyst was not reachable by the probe. this is in accordance with the literature which says that ovarian cysts can be found on ultrasound examination. Ultrasound examination needs to be done to determine the location and boundaries of the cyst.<sup>7,8</sup>

The patient underwent a laparoscopic salpingo-oophorectomy surgery. Post-surgery the patient was diagnosed with a left ovarian dermoid cyst, because during surgery it was found that hair, fat and cartilage were found, which is a picture of a dermoid cyst. According to the literature, dermoid cysts are ovarian cystic tumors that can occur at any age. with the highest prevalence in reproductive age.<sup>1,5,9</sup>

The results of the surgery of the dermoid cyst were carried out by further examination, namely anatomical pathology examination. The results of the anatomical pathology examination showed that the cyst wall consisted of connective tissue, the cyst wall showed hair follicles, fatty tissue, sebaceous glands, cartilage tissue, immature tissue did not appear. Based on the literature, dermoid cysts, also known as mature teratoma, are benign and the most common.<sup>8</sup>

In this case, the size of the cyst was found to be 16.79 cm x 13.04 cm. The size of the cyst above 10 cm can be said to be a Giant ovarian cyst.<sup>2</sup>

Laparoscopic salpingo-oophorectomy was performed because no healthy ovarian tissue remained.<sup>10</sup>

The laparoscopic approach was chosen because it is a minimally invasive procedure that is associated with a significant reduction in operative morbidity, postoperative pain and length of hospital stay and recovery time. This is certainly related to the improvement of the patient's quality of life.<sup>11,12</sup>

#### IV. CONCLUSION

Ovarian cysts that are more than 10 cm in size are called giant ovarian cysts.

Dermoid cysts often occur in reproductive age. Often without symptoms, but if the size of the cyst enlarges it can cause abdominal pain because there is pressure on the surrounding organs.

Operative laparoscopy is one of the actions that can be chosen because with minimally invasive procedures, the recovery period of the patient will be faster.

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