



## Hemorrhagic Corpus Luteum and its Management: A Case Study

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### ABSTRACT

Hemorrhagic corpus luteum (HCL) is an ovarian cyst caused by spontaneous bleeding into a corpus luteum (CL) cyst that forms after ovulation. A hemoperitoneum occurs when the HCL ruptures. The peritoneal irritation caused by the blood effusion is the primary cause of clinical symptoms. The differential diagnosis is broad, and standard management is lacking. using supportive therapies, avoids unnecessary laparoscopic surgery (antifibrinolytic, analgesics, liquid infusion, transfusions and antibiotic prophylaxis). Surgical management should be laparoscopic, with surgical options such as luteumectomy available.

**Keywords:** Corpus luteum, ovarian cyst, ectopic pregnancy, laparoscopy

### 1. INTRODUCTION-

Hemorrhagic corpus luteum (HCL) rupture and bleeding are all known cause by exercise, coitus, trauma or a pelvic examination. Rupture of the corpus luteum can be asymptomatic or cause sudden lower abdominal pain. The pain usually begins during strenuous physical activity, such as exercise or sexual intercourse, and lasts for less than 24 hours. Intermittent cramps preceded the acute pain due to hemoperitoneum caused by the rupture.<sup>1</sup> Other symptoms may include nausea, vomiting caused by a visceral reaction to peritoneal irritation, vaginal bleeding, weakness, and hypotension.<sup>2</sup> An ultrasound, a pregnancy test, a complete blood count, blood clotting tests, and an evaluation of inflammatory markers are the primary diagnostic tools.<sup>3,4</sup> Ectopic pregnancy, adnexal torsion, neoplasm, and pelvic inflammatory disease are all possible diagnoses (PID). Antifibrinolytic, analgesic, supportive therapy, and antibiotic prophylaxis are all required. Surgical management should be laparoscopic, with surgical options including luteumectomy, ovarian wedge-shaped excision, and oophorectomy. Prevention: The ability to preserve fertility is critical, particularly in patients with bleeding disorders or who are receiving anticoagulant therapy; thus, estro-progestins or GnRH analogues are required to prevent ovulation and avoid further episodes of HCL.<sup>5,6</sup>

### 2. Case Presentation

A 22 years old female was admitted to Maharishi Markandeshwar Medical College and Hospital, Kumarhatti, Solan, in Gynaecological department with chief complaints of severe pain in abdomen since 4-6 days, chronic in onset, moderate to severe in intensity, dull aching to spasmodic in nature, generalized to whole of abdomen, no aggravating on relieving factors.

History of burning micturition on & off since 1 week, no history of discharge (foul - swelling) P/V, Fever, vomiting, constipation, loose stools. Physical examination revealed that vital signs are stable, tenderness, guarding, rigidity are present in abdomen, tenderness & fullness present felt on anterior rectal wall.

### 3. Past Medical History

No history of any kind of disease like DM, HTN and any congenital malformation.

She had taken vaccination of covid 19 (Covishield) in September, 2021

### 4. Past Surgical History

There had been no significant general or gynaecological surgical history in the past.

### 5. General Examination

Weight: 58 kg

Height: 164 cm

BMI: 22.1 kg/m<sup>2</sup>

Physical activity: Dull activity, while performing household tasks she felt discomfort, severe pain in abdomen.

Special investigations: Hb, TLC, PCV, Platelets, RBCs, Blood urea, Creatinine, Uric Acid, all electrolytes, LFT, Blood sugar done on 08/01/23. Alkaline Phosphate, Globulin were increased, ALT, Albumin, A/G Ratio were decreased.

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## 6. Treatment

Inj. Metrogl 500mg BD, Inj. Pantop 40 mg OD, Inj. Trenexamic Acid 500 mg BD, Inj. Voveran 78 mg BD, Inj. Piptaz 4.5gm TDS, Tab. Calcium 500 mg OD, Tab. Iron 60mg BD, Cap. Vitamin B Complex 100mg OD

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## 7. Interventions

A laprotomy was performed, followed by a left salphingectomy I/V/O ruptured haematoma. As directed by the doctors, I administered IV therapy and transfused blood to the client. The patient was advised to avoid mobilisation, to get enough rest, and to take medication on time.

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## 8. Care plan

Examine the surgical site for infection. Maintain a clean and dry surgical site. Eat a well-balanced diet that includes protein, fruits, and vegetables to aid in healing after surgery. Drink 8-10 glasses of fluids per day to keep your body hydrated. Encourage the client to engage in regular exercise. Trans and saturated fats, such as those found in butter, margarine, fried foods, snack foods, and sweets, should be avoided.

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## 9. Outcome

After laprotomy proceed with left salphingectomy procedure the patients symptoms were relieved. Patient was advised to take the prescribed medications. Patient was advised to visit hospital after 1 month for follow up.

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## 10. Discussion

Hemorrhagic ovarian cysts are small fluid-filled sacs that have bled in the ovary. These cysts typically form during the luteal or follicular phases of the menstrual cycle. During the follicular stage, hemorrhagic ovarian cysts can also form. An egg is released from a follicle during ovulation. A follicular cyst is formed when a follicle develops into a cyst. A hemorrhagic ovarian cyst occurs when there is bleeding in the follicular cyst. Hemorrhagic ovarian cysts have an unknown cause. Hemorrhagic ovarian cysts can cause severe abdominal pain, pelvic pain, irregular or painful periods, and discomfort in women. Ultrasound can be used to diagnose hemorrhagic ovarian cysts, which usually resolve on their own. While it is uncommon, some cases may necessitate surgical removal.

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## 11. References

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