



ISSN: 2091-2749 (Print)
2091-2757 (Online)

Correspondence

Namita Sindan
Dept. of Gynecology and
Obstetrics, Paropakar
Maternity and Women's
Hospital, Kathmandu, Nepal
Email- namitasindan@163.com

Peer Reviewers

Prof. Dr. Nabees MS Pradhan
Patan Academy of Health
Sciences

Prof. Dr. Jay N Shah
Patan Academy of Health
Sciences

Submitted

04 Jun 2020

Accepted

26 Jul 2020

How to cite this article

Namita Sindan, Adheesh
Bhandari. Huge hemorrhagic
ovarian cyst alongside
suspected ovarian torsion: a
case report. Journal of Patan
Academy of Health Sciences.
2020Aug;7(2):91-94.

DOI:

<https://doi.org/10.3126/jpahs.v7i2.31109>

Huge hemorrhagic ovarian cyst alongside suspected ovarian torsion: a case report

Namita Sindan^{1*}, Adheesh Bhandari^{2*}

¹Dept. of Gynecology and Obstetrics, Paropakar Maternity and Women's Hospital, Kathmandu, Nepal

²Currently Private Practice

*Equally Contributed

Abstract

An ovarian cyst is usually a relatively large, fluid-filled cystic structure (diameter greater than 3 cm) that originates from the surface or inside the ovary. Ovarian cysts can be simple or complex, depending on their internal material. Hemorrhagic ovarian cysts (HOCs) are commonly seen in clinical practice.

Most of them resolve naturally during follow-up except in a minority of cases in which surgical intervention is needed. Ovarian torsion indicates partial or complete rotation of the ovary and a portion of the fallopian tube along its supplying vascular pedicle. It usually occurs in the reproductive age group, more on the right side (about 60%), and often presents with acute lower abdominal pain lasting for a few hours to 24 hours. It is one of the harmful conditions, hampering blood supply of ovary which may rise to overall necrosis of ovarian tissue and other difficulties, if not identified and managed in time. We present a case of a huge hemorrhagic ovarian cyst managed in the Department of Gynecology and Obstetrics, Paropakar Maternity and Women's Hospital, Kathmandu, Nepal.

Keywords: hemorrhagic ovarian cyst, ovarian torsion

Introduction

Women experiencing pelvic pain and abnormal bleeding often require ultrasonography (USG) and some ovarian cysts are detected incidentally. Recent research has shown that simple cysts found incidentally are probably not dangerous.¹

An ovarian cyst is mostly a benign lesion most commonly seen in women aged 20-50 years and may be simple or complex. Around 70% of patients are in advanced stage at the time of presentation. For ovarian cysts larger than 8 cm and <10cm, surgery is recommended.²

Ovarian torsion is a rare emergency which requires early management to salvage ovary and tube. Typically, patients present with acute lower abdominal pain, vomiting, and severe localized abdominal tenderness over the affected ovary, often with radiation to back and thigh. Prevalence of ovarian torsion in postmenopausal women is 17%.³

We present a case on a huge hemorrhagic ovarian cyst alongside suspected ovarian torsion and its management.

Case Report

A 25-year lady presented to our emergency late at night complaining of severe abdominal pain and distention. She had attended another hospital one day back due to sharp abdominal pain with the severity of 10/10 where she was managed for pain. Ultrasound scan showed a well-defined cystic lesion measuring 15x9.7cm in the right iliac fossa with few echogenic contents with blood flow noted on the wall of the cyst. Contrast enhanced computed tomography (CECT) was requested for further confirmation of the lesion.

Her CECT revealed a large cystic lesion in the pelvis extending to the abdominal cavity predominantly on the right side with a hyperdense wall, fat attenuating areas heterogeneously hypodense area (likely

necrotic) and mild ascites suggestive of right ovarian dermoid cyst suspicious of twisted . Due to the unavailability of a Gynecologist at that hospital, she was referred to our hospital.

At our hospital, a thorough history revealed that she started noticing an increasing swelling in her abdominal since past 4 days. She denied any trauma to abdomen. She was a primipara and her last childbirth was one year back. Her menstrual history was regular and normal. She was afebrile, blood pressure was 120/70 mmHg on right arm, pulse 110/minute, SpO₂ 95%, and respiratory rate was 24 breaths per minute. Her abdomen was tender on the right lower quadrant with guarding. The mass was equivalent to 26 weeks uterine size during pregnancy. On per vaginal examination, uterus size could not be assessed due to tenderness; bilateral fornices were full. Immediate blood samples were drawn and sent to the lab, veins were opened in both arms with wide bore cannula and pain management was done. Her blood investigations showed, hemoglobin – 6.6 g/dl, total counts – 11,700/cumm, neutrophil 83% and platelets 150,000/mcL. Liver function and renal function tests were within normal limits.

Regarding her surgical history, she had undergone exploratory laparotomy with colostomy secondary to necrotizing enterocolitis while she was two months old followed by colostomy reversal while she was six months old, and laparoscopic cholecystectomy at ten years of age. Her medical history was significant for well-controlled asthma.

Emergency pelvic ultrasound revealed a large complex right adnexal cystic lesion of 21x10.7x21.2cm with the appearance suggesting right ovarian origin; no significant flow was seen within the right ovary on color Doppler, and thus right ovarian torsion was suspected. Her urine pregnancy test was negative.

With the diagnosis of right ovarian torsion, the patient underwent an emergency

laparotomy. Help was sought from a General surgeon intra-operatively for adhesion.

Intraoperatively, about 20x20cm right hemorrhagic ovarian cyst, twisted 3 times along its pedicle and with no healthy ovarian tissue was identified. Her left ovary was found to be cystic; cystectomy was done and cheesy material measuring 3x2cm was removed, preserving the remaining ovary, Figure 1A, B. Cyst with ovary and tube on the right side was removed and sent for histopathological examination. Cut section of the right ovarian cyst revealed 2 liters of hemorrhagic fluid.

Postoperative recovery was uneventful, and was discharged on the 5th day. Histopathology was suggestive of right mature cystic teratoma with ischemic changes and normal fallopian tubes, left cystic mature teratoma.

Discussion

Hemorrhagic ovarian cysts are not uncommon

during day-to-day clinical practice, but there are limited reports in the literature offering sufficient and comprehensive study of HOCs.⁴⁻⁶ The clinical presentation varies from no symptoms to acute abdomen pain, and diagnosis of HOCs can be confused with other acute abdominal pain like torsion of ovarian cyst, tubo-ovarian abscess or acute appendicitis.⁵ The definitive diagnosis of a HOC can be done in most cases with history and specific findings of sonography, preferably transvaginal. Such patients have a sudden onset of acute pelvic pain, typically in the mid-cycle, negative pregnancy test, and absence of fever and leukocytosis.

Hemorrhagic ovarian cysts can usually be followed to spontaneous resolution sonographically in 6-8 weeks as most them resolve in 6 weeks or reduce significantly in size and change in morphologic presence. Hemorrhagic cysts are most commonly seen in premenopausal women.⁷

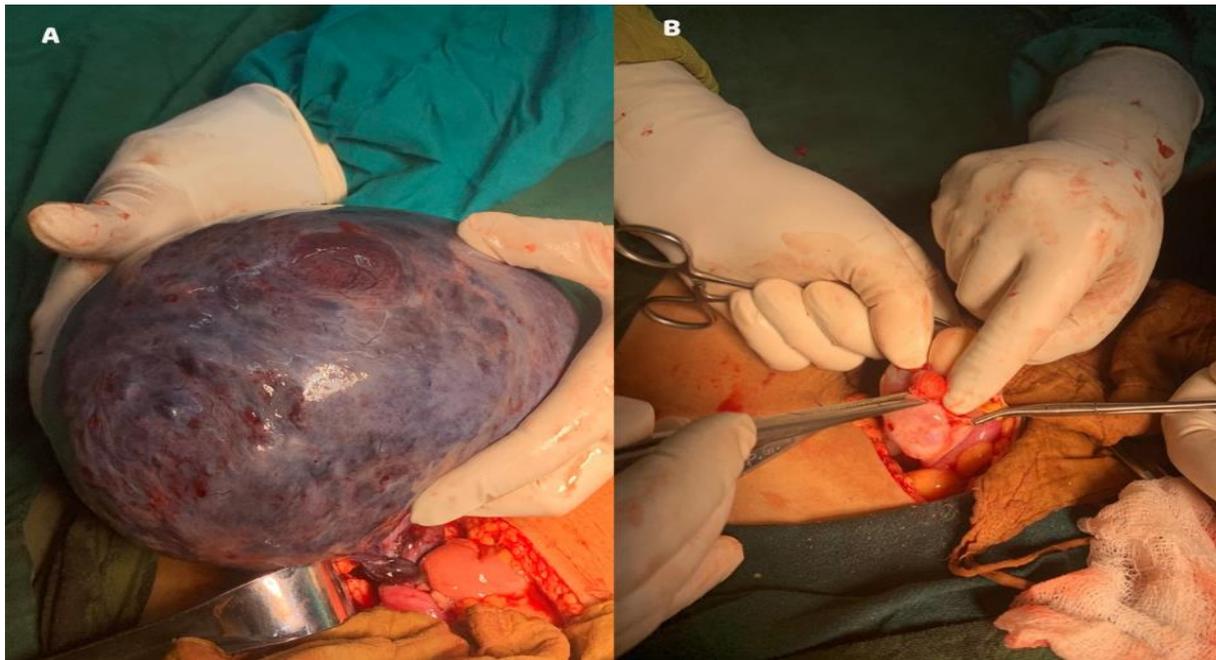


Figure 1A. Huge hemorrhagic ovarian cyst alongside with ovarian torsion, the left tube was also partially twisted. Figure 1B. Cyst with ovary and tube on the right side was resected

Ovarian torsion is more commonly seen in benign growth than malignant. The occurrence of ovarian torsion with ovarian

malignancy is seen in <2%.^{8,9} The gold standard to manage ovary torsion is surgery, which also confirms the torsion. There are

two surgical techniques, 1) laparoscopy and 2) laparotomy. A laparoscopic method has become a popular technique; however, if malignancy of the ovary or fallopian tube is found, a laparotomy must be done.^{10,11} While performing the surgery, it is essential to assess ovarian viability and preserve its function. The viability of a torsed ovary during surgery is done by gross visual assessment.

Adnexal torsion due to a hemorrhagic cyst is occasionally encountered.¹²

Conclusion

In our case, there was a huge hemorrhagic ovarian cyst with ovarian torsion, and presented in emergency. She had successful surgical management.

Acknowledgement

We thank the doctors of the Department of Gynecology and Obstetrics, Paropakar Maternity and Women's Hospital, for providing the image and necessary information. We would like to thank Dr. Namrata Sindan and Rajan KC for guiding us to write and revise the manuscript.

Conflict of Interest

None

Funding

None

Author Contribution

NS collected all the data; AB and NS wrote the manuscript and designed the whole work.

Reference

- Smith-Bindman R, Poder L, Johnson E, Miglioretti DL. Risk of Malignant Ovarian Cancer Based on Ultrasonography Findings in a Large Unselected Population. *JAMA Intern Med.* 2019;179(1):71-7. DOI | PubMed | GoogleScholar | PDF | Weblink
- Yuen PM, Yu KM, Yip SK, Lau WC, Rogers MS, Chang A. A randomized prospective study of laparoscopy and laparotomy in the management of benign ovarian masses. *Am J Obstet Gynecol.* 1997;177(1):109-14. DOI | PubMed | GoogleScholar | PDF | Weblink
- Hasson J, Tsafirir Z, Azem F, et al. Comparison of adnexal torsion between pregnant and nonpregnant women. *Am J Obstet Gynecol.* 2010;202:536.e531-536. DOI | PubMed | GoogleScholar | PDF | Weblink
- Ishihara K and Nemoto Y. Sonographic appearance of hemorrhagic ovarian cyst with acute abdomen by transvaginal scan. *Nihon Ika Daigaku Zasshi.* 1997;64:411-5. DOI | PubMed | GoogleScholar | PDF | Weblink
- Nemoto Y, Ishihara K, Sekiya T, et al. Ultrasonographic and clinical appearance of hemorrhagic ovarian cyst diagnosed by transvaginal scan. *J Nippon Med Sch.* 2003;70:243-9. DOI | PubMed | GoogleScholar | PDF | Weblink
- Jain KA. Sonographic spectrum of hemorrhagic ovarian cysts. *J Ultrasound Med.* 2002;21:879-86. DOI | PubMed | GoogleScholar | PDF | Weblink
- Joshi M, Ganesan K, Munshi HN, et al. Ultrasound of adnexal masses. *Semin Ultrasound CT MRI.* 2008;29:72-97. DOI | PubMed | GoogleScholar | PDF | Weblink
- Oltmann SC, Fischer A, Barber R, et al. Cannot exclude torsion--a 15-year review. *J Pediatr Surg.* 2009;44:1212-6; discussion 1217. DOI | PubMed | GoogleScholar | PDF | Weblink
- White M and Stella J. Ovarian torsion: 10-year perspective. *Emerg Med Australas.* 2005;17:231-7. DOI | PubMed | GoogleScholar | PDF | Weblink
- Oelsner G, Cohen SB, Soriano D, et al. Minimal surgery for the twisted ischaemic adnexa can preserve ovarian function. *Hum Reprod* 2003; 18:2599-602. DOI | PubMed | GoogleScholar | PDF | Weblink
- Tsafirir Z, Hasson J, Levin I, et al. Adnexal torsion: cystectomy and ovarian fixation are equally important in preventing recurrence. *Eur J Obstet Gynecol Reprod Biol.* 2012;162:203-5. DOI | PubMed | GoogleScholar | PDF | Weblink
- Yilmaz E, Usal C, Kovanlikaya A, et al. Sonographic and MRI findings in prepubertal adnexal hemorrhagic cyst with torsion. *J Clin Ultrasound.* 2001;29:200-202. DOI | PubMed | GoogleScholar | PDF | Weblink