



## **Case Report on Management and Outcome of Ovarian Torsion.**

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### **ABSTRACT:**

Ovarian torsion is a life-threatening illness that affects 4.9 out of every 100,000 females aged 1 to 20 years.<sup>1</sup> Its etiology by the ovary twisting on its vascular pedicle, which causes lymphatic and venous congestion initially, then a loss of arterial blood flow, ending in tissue necrosis. Torsion can take place at any age group, however it is most commonly related with the presence of an ovarian tumour or cyst. A 32 year's female admitted in Hospital on date 29/02/2020 with chief complaints of pain in abdomen in left lumbar region with radiation to groin on the date of 29/02/2020 along with this she had vomited 5-7 episodes on that day. She was on her periods during that time, she had pain and she thought that, it was due to her periods but the pain was more severe. Physical examination, blood test and Ultrasonography was done. Ultrasonography report shows that left ovary was enlarged, in doppler sonography report show ovarian arteries blood flow was decrease. After physical examination and USG, doctor diagnosed a case of Ovarian Torsion. Patient got medical treatment and patient undergone surgical treatment i.e. Total Abdominal Hysterectomy (TAH) in emergency. Patient was safe. Conclusion: Ovarian cyst and torsion can take place at any age group. Therefore a high rate of suspicion women with radiographic confirmation and adequate clinical presentation reduces death rate and complications of the disease. Rapid diagnosis and surgical management are the clue to recovery of ovarian cyst and torsion.

**Keywords:** Ovarian Torsion, ovarian cyst, Abdominal pain, Ultrasound, Total Abdominal Hysterectomy.

### **Introduction:**

Ovarian torsion is a life-threatening illness that affects 4.9 out of every 1,00,000 ladies aged between the 1 to 20 years.<sup>1</sup> It's caused by the ovary twisting on its vascular pedicle, which causes lymphatic and venous congestion initially, then a loss of arterial blood flow, ending in tissue necrosis. Torsion can occur at any age, however it is most commonly associated with the presence of an ovarian tumour or cyst<sup>2</sup>. Normal ovaries, on the other hand, have been found to twist around on their axis, with an prevalence ranging from 16% to 49%<sup>3</sup>. The twisting of a normal ovary is more common in the paediatric and adolescent age groups, which may be due to the longer ovarian pedicle<sup>4</sup>. The torsion risk is linked to the size of the ovarian tumours. Torsion of the ovary has been recorded in masses ranging from 1 to 30 cm (mean 9.5 cm)<sup>5</sup>, but it can happen with any size mass. Multiple big ovarian follicular cysts can result during ovulation inducement for infertility treatment; The danger of torsion is higher in big cysts.<sup>6</sup> When examining a pelvic mass, imaging studies are the most important<sup>7</sup>. Ultrasonography is used as a first-line diagnostic tool. Because of edoema or vascular and lymph engorgement, a torted ovary may be rounder and larger in comparison to the contralateral ovary<sup>8,9</sup>. Ovarian mass and its elements, site, thickness, Doppler flow, and size of an ovarian tumour can all be easily distinguished by ultrasonography. In the vessels of a torted ovary, Doppler flow can be reduced or nonexistent<sup>10,11,12</sup>. According to prospective research show that doppler flow has increase sensitivity and specificity<sup>13</sup>; one more retrospective research reported low sensitivity and high specificity in the diagnosis of ovarian torsion<sup>14</sup>. Surgery is the only way to diagnose and cure ovarian torsion. Laparoscopy and laparotomy are the two surgical options. A laparoscopic method has grown increasingly common. A laparotomy should be performed if malignancy of the ovary or fallopian tube is suspected.<sup>15,16</sup> In currently years, surgical evaluation and preservation of ovarian function have been the mainstay of ovarian torsion treatment. Detorsion and ovarian conservation are almost always suggested now instead of salpingo-oophorectomy because there are various ways to accomplish the surgery<sup>17</sup>.

### **Patient Information:**

A 32 years female admitted in AVBR Hospital on date 29/02/2020 with chief complaints of pain in abdomen in left lumbar region with radiation to groin on the date of 29/02/2020 along with this she had vomited 5-7 episodes on that day. She was on her periods during that time, she had pain and she thought that, it was due to her periods but the pain was more severe.

A 32 year's old female was visited in Hospital on casualty date 29/02/2020 with chief complaints of pain in abdomen in left lumbar region with radiation to groin along with she had vomited 5-7 episodes on that day. She was on her menstrual periods during that time, she had pain and she thought that it was due to her periods but the pain was more severe.

Present case had a history of ovarian cyst (chocolate cyst) in 2013, where she has undergone an operation on 'Right Side unilateral salpingo-oophorectomy' at Hospital. After 1 month when she came for follow-up, ultrasonography has done again, 1½ mm of ovarian cyst was detect again in left side where she had taken 1 month continuous treatment, along with this she had taken homeopathic treatment also. She had past surgical history. In 2013 surgery was done of right side unilateral salpingo - oophorectomy, rather than this she had undergone LSCS in 2011.

She was belong to nuclear family. Her husband was expired in accident (2012) and she was belong to middle class family. She was breadwinner in their family, her family income is Rs. 15000/- per month. She was mentally stable, conscious and oriented to date, time and place. She was maintain the good relationship with doctors and nurses as well as other patients also. No any bad history like alcohol consumption, tobacco chewing etc.

On physical examination abdomen scar and stretch marks was present due to L.S.C.S, during vaginal inspection scanty bleeding was present.

In blood test Hb%, MCHC was decrease. MCV and total white blood count was increased. Platelet count was normal.

**Diagnostic method:** Physical examination, blood test and Ultrasonography was done. Ultrasonography report shows that left ovary was enlarged, in doppler scan report show that ovarian arteries blood flow was decrease.

No challenges experienced during diagnostic evaluation.

After physical examination and diagnostic evaluation doctor diagnosed a case of Ovarian Torsion with ovarian cyst. Patient condition was poor.

**Therapeutic Intervention:** All blood investigation, ultrasonography and Doppler sonography done. She was nil per mouth since. Before surgery she got pre- operative antibiotic medication. Prepared the abdominal and vaginal part with antiseptic solution. She also got the sensitivity test i.e. Inj. Xylocaine and Inj. TT. Written and oral consult was taken. IV fluid was start.

Medical and surgical intervention done.

Total Abdominal Hysterectomy done on 29/02/2020.

In medical intervention Inj. Cefratrixime 1mg given twice a day in intravenous rout for reduced the bacterial infection. Inj. Pantoprazole 40 mg given in twice a day intravenously for reduced the stomach acid level. Inj. Metronidazole 100 ml given thrice a day in intravenously to treat the infection. Inj. Tramadol 50 mg given intramuscular rout to reduce the pain. Suppository Zonac 100 mg given a thrice a day to treat the postoperative pain and inflammation.

Patient was give the follow up to hospital and patient condition was good.

No any changes in medication and no any complication seen in patient. No any adverse effect of drug in my patient.

## Discussion

**Strengths:** Present case under in physical examination and radiaological investigation. This investigation was help for early detection of diagnosis. According to diagnosis patient got a surgical treatment in emergency situation and patient life was secure.

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## Discussion:

A bleeding from ovarian cyst is an adnexal mass that develops as a result of haemorrhage into a follicular, corpus luteum, or theca lutein cyst. The majority of hemorrhagic ovarian cysts are functioning; a few may be cancerous, but they are all benign. It's most common in young ladies of child bearing age, although it's also been documented in perimenopausal ladies on rare occasions<sup>18</sup>. Ovarian torsion is one of the complications associated with big ovarian cysts. In female, ovarian torsion might appear as severe abdominal pain in the emergency. To maintain tubo-ovarian function and avoid substantial morbidity and death, rapid diagnosis is frequently required<sup>19</sup>. There may be partial or complete rotation of adenexa with related to ischemia. Ovarian torsion is observed in about 2% to 15% of female who have had previous adnexal mass operations<sup>20</sup>. It starts with a sharp ache in the pelvis, followed by nausea and vomiting. ovarian masses of 5 cm or greater were seen in nearly 80% of patients with torsion of ovary<sup>21,22</sup>. The torsion risk is linked to the size of the ovarian tumours. However, ovarian torsion can happened with masses with size from 1 to 30 cm (mean 9.5 cm). Torsion may be more likely in large follicular cysts caused by ovulation inducement during infertility treatment.<sup>23</sup>

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## Conclusion:

Ovarian cyst and torsion can happened at any age group. Therefore a high rate of suspicion women with radiographic evidence and adequate clinical presentation reduces death rate and complications of the disease. Rapid diagnosis and surgical intervention are the keys to recovery of ovarian cyst and torsion.

**Additional Information:**

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