

A rare case of synchronous bilateral ovarian torsion of non-pathological ovaries in an adolescent girl

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Introduction

- Torsion of an adnexal mass is fifth most common gynecologic emergency.
- Incidence of torsion in girls of <20 years: 5 in 100,000.
- Synchronous bilateral (B/L) ovarian torsion of non-pathological ovaries in adolescent girl is scarcely reported in literature.

Case

A 14-year-old girl presented in emergency with 10 days history of

- Pain lower abdomen,
- Vomiting and
- *Constipation*

No history of fever or any urinary complain or any similar episodes in past.

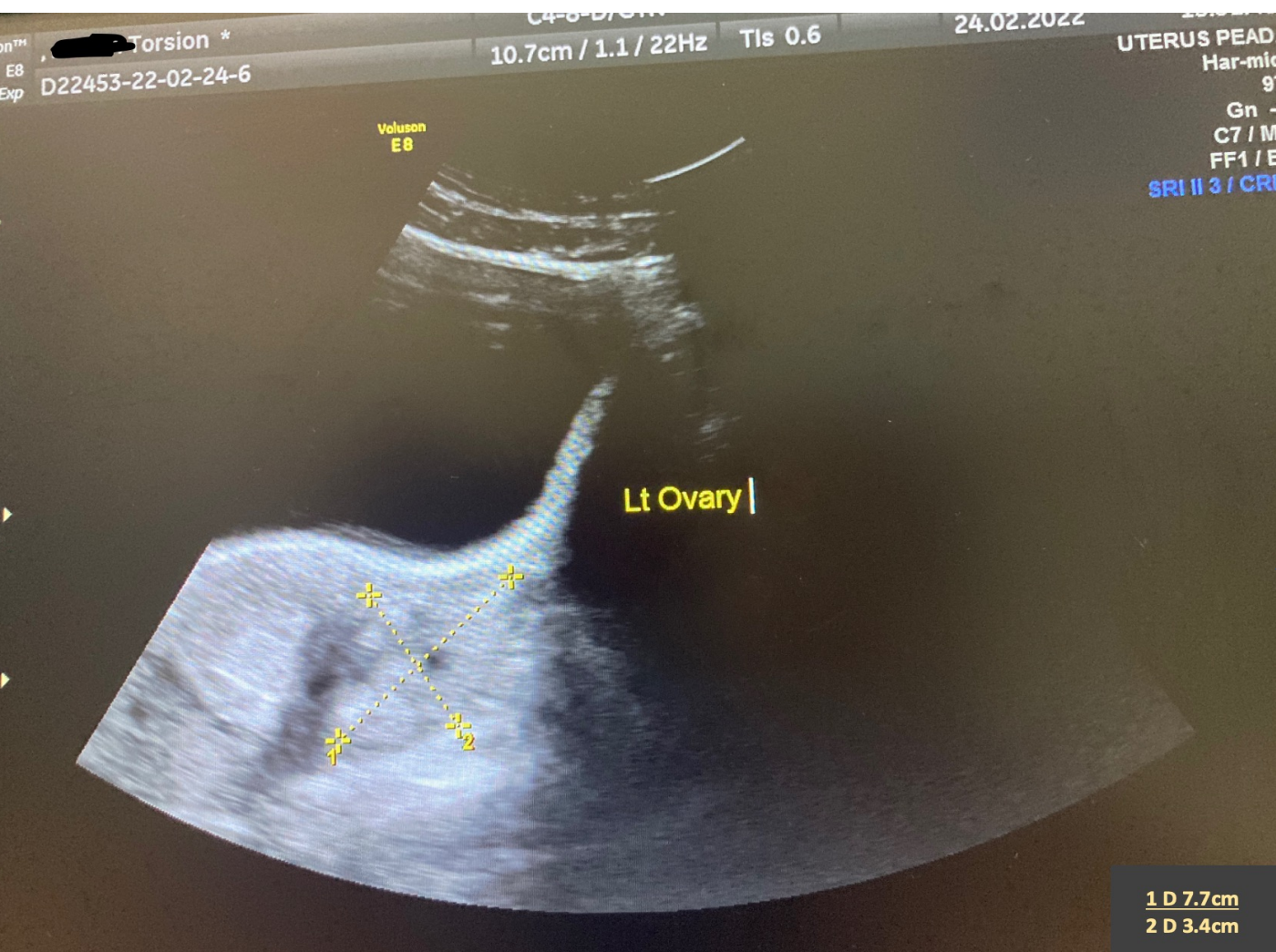
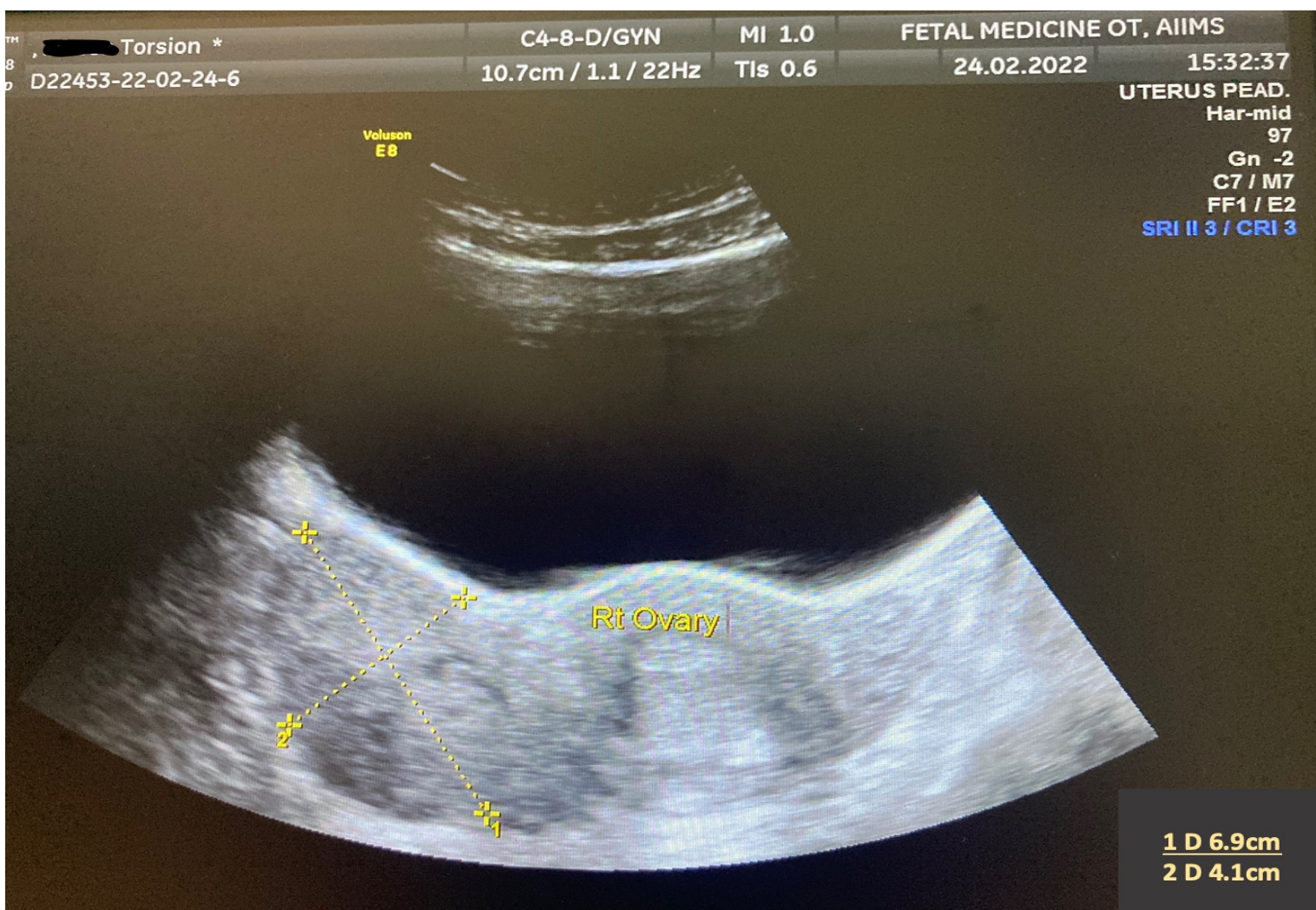
M/H: Menarche 1.5 years back, regular cycles, mild dysmenorrhea, LMP: 2 days back.

Examination: Pallor- Absent, PR- 110 bpm, BP- 124/82 mm Hg

P/A: Tender abdominopelvic mass corresponding to 12 weeks gravid uterus

USG: S/O complete right adnexal torsion and partial torsion in left adnexa.

Right Ovary: 6.9x4.1 cm with solid homogenous appearance with multiple tiny cysts within & minimal peripheral vascularity



Left Ovary: 7.7x3.4 cm with multiple tiny cysts within. Left adnexa showed minimal color flow in periphery and incomplete whorl

As synchronous bilateral ovarian torsion is a rare entity, keeping in mind possibility of germ cell tumour, tumour markers were ordered.

Table 1: Investigations

Parameter	Value	Normal value
Hb (gm/dl)	13	11.5-15
LDH (IU/L)	227	105-333
AFP (ng/ml)	1.36	10-20
hCG (IU/L)	<0.1	< 5
CA-125 (U/ml)	21.65	< 35

Management

Provisional diagnosis: Synchronous B/L ovarian torsion

Surgery performed: Emergency laparoscopy + B/L ovarian detorsion without ovarian fixation



Figure 1: Left ovary around 5 x 4 cm in size, congested, edematous, black in color with 2.5 loops of torsion in adnexa

Figure 2: Right ovary around 6 X 4 cm in size, edematous, with 3 loops of torsion of adnexa

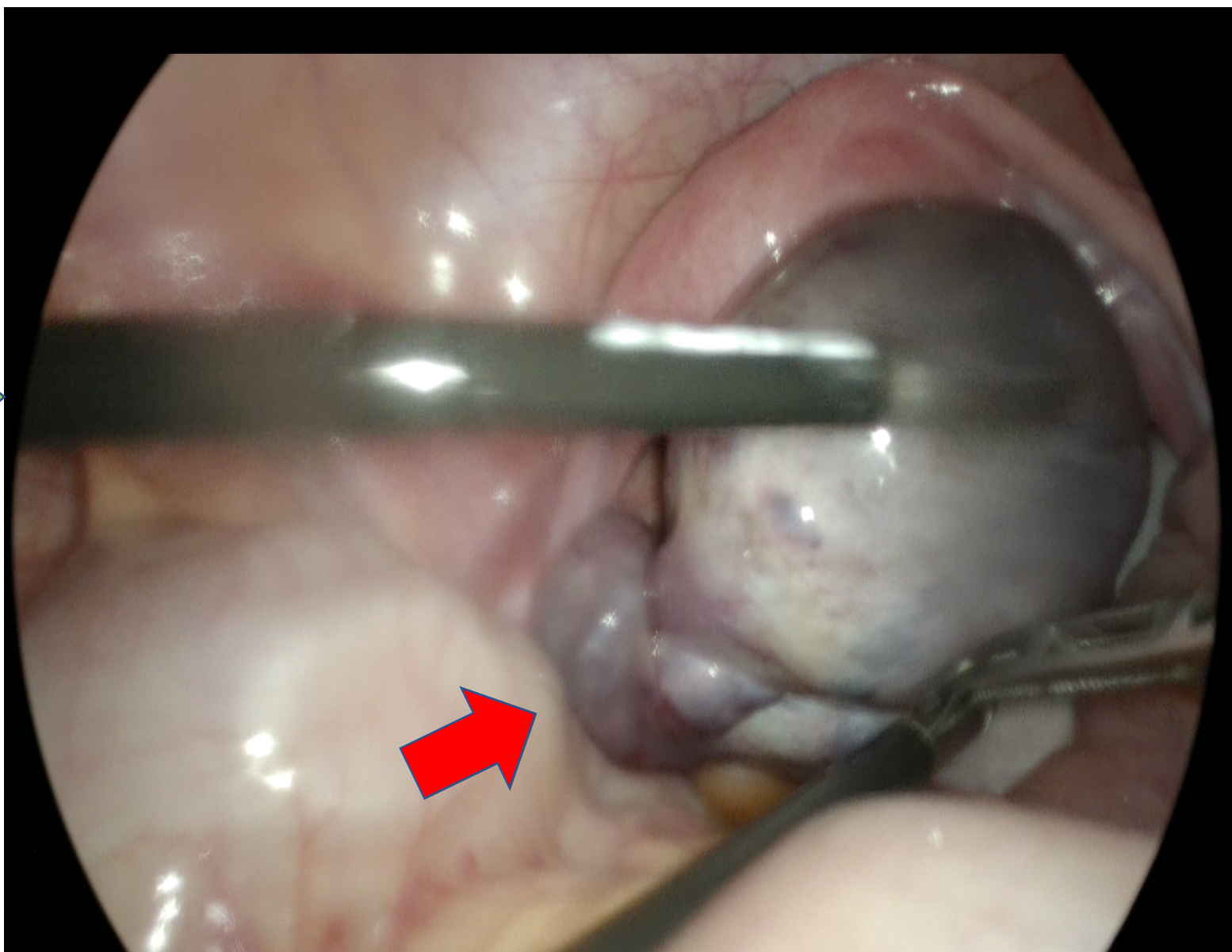


Figure 3: After detorsion regain of color of left ovary at end of surgery

Follow up

Patient responded to surgery & discharged on post operative day-2.
Patient was asymptomatic at 3 months after surgery without any recurrence of pain.
USG at 3 months visit: bulky ovary on right side and normal ovary on left side.

Discussion

- This case presents occurrence of B/L ovarian torsion in adolescent girl in non pathological ovaries, which is very rare.
- Our case also had constipation as one of presenting symptom of torsion, which has been reported in literature.

Table 2: Literature on synchronous B/L ovarian torsion in pediatric and adolescent girls

Author and Year	Age	Presentation	Management	Intraop findings	Pathology
Takeda A et al, 2006	9 years	Intermittent abd pain for a month with severe exacerbation	Em. laparoscopic detorsion and B/L ovarian cystectomy	Left adnexal 360° twist and right adnexal twist 180°	B/L dermoid cyst
Dumont T et al, 2011	12 years	Periumbilical pain, nausea, vomiting	Laparoscopic detorsion and oophoropexy	720° B/L ovarian torsion	None
Kitporntheranunt M et al, 2011	11 years	Intermittent abd pain for 4 yrs, aggravated for 24 hrs	Laparoscopic detorsion + B/L cystectomy without oophoropexy	LO: 2 rounds twist RO: 3 rounds twist	Bilateral serous cyst
Michelle Y et al, 2012	13 years	NA	RO: oophorectomy & LO: oophoropexy	NA	NA
Present case 2022	14 years	pain lower abdomen, vomiting for 10 days	Laparoscopic detorsion without oophoropexy	Lt adnexa: 2.5 loops of torsion Rt adnexa: 3 loops	None

Conclusion

- B/L ovaries can also undergo torsion simultaneously that too in non-pathological ovaries.
- A high index of suspicion of torsion in patients presenting with acute abdomen with no other non gynecological cause can help clinician to diagnose this clinical condition.
- Constipation can be one of the presentations of ovarian torsion.

Bibliography

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