# Torsion in Pregnant Patient with a Positive Actim Partus: A Diagnostic Challenge

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## Background

Ovarian torsion is thought to complicate from 1.6-5:10 000 spontaneous pregnancies, with rates being higher in the first and second trimester.[1, 2]

We are presenting a case of ovarian torsion in the third trimester, which was diagnostically complicated by a positive actim partus in the setting of palpable uterine activity.

## Discussion

Torsion should be considered as a diagnosis in patients at any gestation in whom there is a known adnexal mass. Laparoscopy is recommended if this is the suspected diagnosis. A recent cohort study by Bassi et al showed that 57% of pregnant patients with OT underwent a laparotomy, with a further 9% requiring a conversion to laparotomy from laparoscopy.[1] Thus, it is important to prepare for the likelihood of open surgery in these cases.

Tests to predict onset of preterm labour, such as the actim partus, are a useful clinical adjunct, but can create a diagnostic dilemma due to relatively high sensitivity but low specificity.

## Key Points

Ovarian torsion should be considered **at any gestation of pregnancy,** particularly with a known cyst

**Positive point of care** testing for preterm labour **does not rule out non-obstetric causes of pelvic pain**

## Case

A 27 yo G6P4 at 27+6 was transferred to our tertiary hospital from a peripheral centre with a presumed diagnosis of threatened preterm labour. She had a background of 2 previous spontaneous preterm births as well as a known 7cm left adnexal cyst. She presented with a 7-day history of left lower quadrant pain acutely worse in the past 24hrs. She began contracting palpably 2:10 and had a positive actim partus despite a closed cervix. This necessitated tocolysis, steroid loading and transfer to a tertiary centre.

On arrival, she was extremely distressed and required multiple analgesic agents including buscopan, diazepam, oxycodone and morphine. Repeat cervical assessment was stable. Initially, emphasis was placed on the possibility of preterm labour rather than adnexal pathology, given her history coupled with the positive actim partus. However, transvaginal ultrasound at our facility confirmed an 11cm left ovarian mass with trace blood flow. She was taken urgently to theatre for a diagnostic laparoscopy which revealed a torted left ovary, associated with a cyst, and no evidence of recirculation after detorsion. Due to difficulty in mobilizing the large cyst, the procedure was converted to a laparotomy to reduce risk of compromise to large uterine vessels. A left oophorectomy was performed and histology confirmed a mucinous adenofibroma complicated by torsion. The patient had an unremarkable postoperative course and proceeded to deliver spontaneously at 38+0 weeks.

## References

1. Bassi A, Czuzoj-Shulman N, Abenhaim HA. Effect of Pregnancy on the Management and Outcomes of Ovarian Torsion: A Population-Based Matched Cohort Study. J Minim Invasive Gynecol. 2018 Nov-Dec;25(7):1260-1265. doi: 10.1016/j.jmig.2018.03.022. Epub 2018 Mar 30. PMID: 29609035.

2. Young R, Cork K. Intermittent Ovarian Torsion in Pregnancy. Clin Pract Cases Emerg Med. 2017 Mar 15;1(2):108-110. doi: 10.5811/cpcem.2016.12.32932. PMID: 29849404; PMCID: PMC5965408.

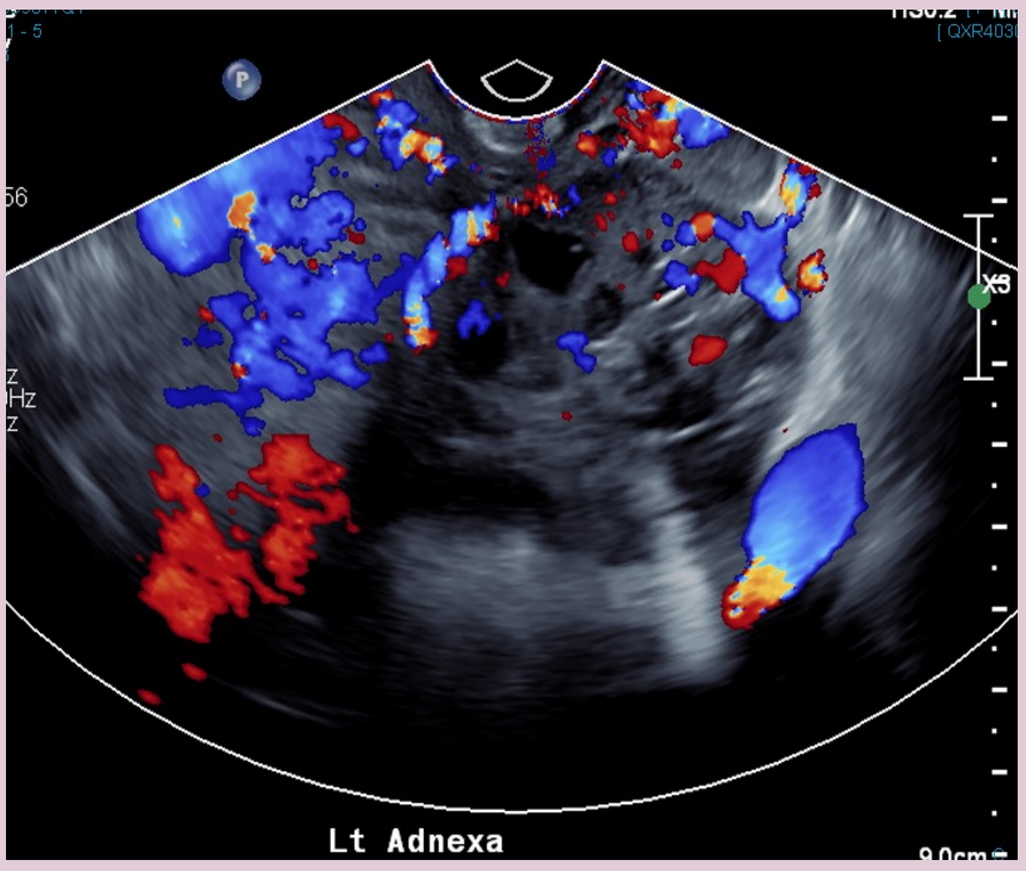


**Figure 1:** Transvaginal USS demonstrating 11mm cyst with trace blood flow