

# Maternal Collapse in COVID-19: A Rare Case of Uterine Torsion, Placental Abruption and Fetal Death in Utero in Third Trimester

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## Introduction:

Uterine torsion is defined as a rotation of the uterus on its long axis of greater than 45 degrees [1] Torsion of the gravid uterus is a rare phenomenon, with only 271 cases reported in medical literature to date (2). The most common pathological findings in cases of uterine torsion are reported to be: fetal malposition (mostly transverse lie), fibroid uterus, uterine malformations (double or bicornate uterus) and pelvic adhesions [3, 4]. Placental abruption was seen in just 4 per cent of published cases of uterine torsion up until 1992 [3].

## Case:

A 27-year-old G2P1 at 32 weeks gestation presented to a tertiary in hypovolemic shock with severe abdominal pain. The patient was treated as suspected COVID-19 due to community collapse with an inability to complete a risk assessment. Symptoms were acute onset lower abdominal pain associated with vomiting and exacerbated by movement of the lower limbs. There was no history of contractions, vaginal bleeding or trauma, and normal fetal movements had been felt three hours earlier. The patient had a previous uncomplicated lower uterine segment caesarean section with a pregnancy interval of 12 months, and an otherwise unremarkable antenatal and past history.

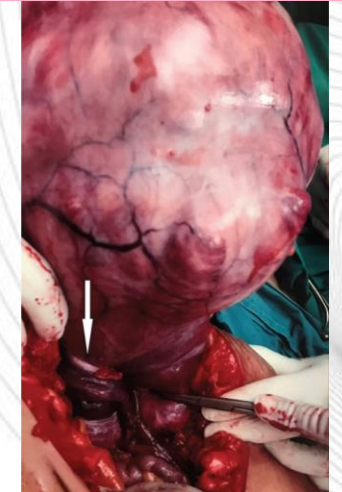
On examination, the patient was unable to lay flat or extend her legs due to pain, with ongoing evidence of severe haemodynamic shock and a reduced GCS. The abdomen was distended without peritonism, the uterus was diffusely tender with significant pain over the lower uterine segment, and there was no vaginal loss. A point of care ultrasound confirmed a fetal death in utero. A massive transfusion protocol was

activated, with transfer to a designated COVID-19 theatre arranged after initial stabilisation and resuscitation.

An infra-umbilical midline incision was performed under general anaesthetic which revealed a Couvelaire uterus, torqued 180 degrees at the level of the lower segment and a large haemoperitoneum, secondary to active bleeding from the left utero-ovarian ligament vasculature. Manual de-torsion was successfully performed, followed by a caesarean section of a cephalic stillborn fetus via a classical vertical uterine incision due to significant lower segment vascular congestion. A complete placental abruption was evident with a large retroplacental clot. Haemostasis was achieved with suture ligation of the left utero-ovarian ligament vessels. The Patient remained well post operatively and at a four-week review.

## Learning Points:

- Uterine torsion is a rare, potentially fatal condition with a high fetal mortality, so is an important differential diagnosis to be considered in the obstetric patient with severe abdominal pain.
- It is vital to routinely assess the uterus for rotation when performing a caesarean section to avoid inadvertent posterior hysterotomy and related complications (including injury to the uterine vessels, ovarian pedicles and ureters).
- A coordinated, multidisciplinary team approach in the management of an obstetric patient with signs of hypovolemic shock is critical in achieving a good maternal outcome.
- Robust hospital-wide COVID-19 policies and procedures are essential in providing emergency surgical care during a pandemic.



Source: Ho et. Al (2019) [www.journalmc.org/index.php/JMC/article/view/3314/2609](http://www.journalmc.org/index.php/JMC/article/view/3314/2609)

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