







# A bump in a hard place: A rare case of uterine incarceration in the second trimester managed with manual reduction and vaginal pessary.

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# **BACKGROUND**

Incarceration of the gravid uterus is a rare complication affecting 1 in 3000 pregnancies<sup>1</sup>. It occurs when the gravid uterus becomes entrapped between the sacral promontory and pubic symphysis and is strongly associated with uterine retroversion<sup>2</sup>. In the first and early second trimester the most commonly reported complication is acute urinary retention<sup>3</sup>.

# AIM

To demonstrate management of uterine incarceration in the early second trimester.

### CASE

38-year-old G3P1M1 K13+2 visiting from a regional town presented to a tertiary emergency department with 24-hour history of abdominal pain and urinary retention. Observations, bloods and urine microscopy were normal. Ultrasound demonstrated a viable intrauterine pregnancy however, the uterus was significantly retroflexed with a sharply anteriorly positioned elongated cervix, strongly indicating uterine incarceration. Key findings on physical examination were the cephalad displacement of the cervix and palpable fundus within the curvature of the sacrum. Trial of conservative management with urinary catheter alone was unsuccessful. The patient was taken to theatre for examination under anaesthetic. The uterus was manually reduced under ultrasound guidance and a ring pessary and vaginal pack were placed to ensure the uterus remained upright.



Figures 1 and 2: Ultrasound images showing a significantly retroverted uterus with elongated anterior cervix and urinary bladder draped over the anterior surface of the retroflexed uterus.



## **RESULTS**

The patient experienced immediate improvement in symptoms. The following ultrasound day, demonstrated an anteverted uterus with long closed cervix. The vaginal pack was removed, and trial of void passed. The patient was discharged with plan for removal of the vaginal pessary in 7 days and ongoing care with her local rural generalist obstetrician.

### DISCUSSION

The diagnosis of uterine incarceration is based upon clinical history, examination findings and utilisation of pelvic imaging. This case demonstrates the successful stepwise management of uterine incarceration in the early second trimester. Early diagnosis of incarcerated uterus helps to facilitate prompt treatment and reduces the risk of complications and lead to maternal and fetal morbidity

#### References

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