Management of Incarcerated Ventral Hernia with Obstruction in Pregnancy – A Case Report

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Introduction

- Incarcerated ventral hernia causing bowel obstruction is not an uncommon problem.
- However, hernia incarceration causing bowel obstruction is a rare complication in pregnancy.
- Discussed is the presentation and management of a pregnant patient who presented with an incarcerated ventral hernia causing a bowel obstruction.

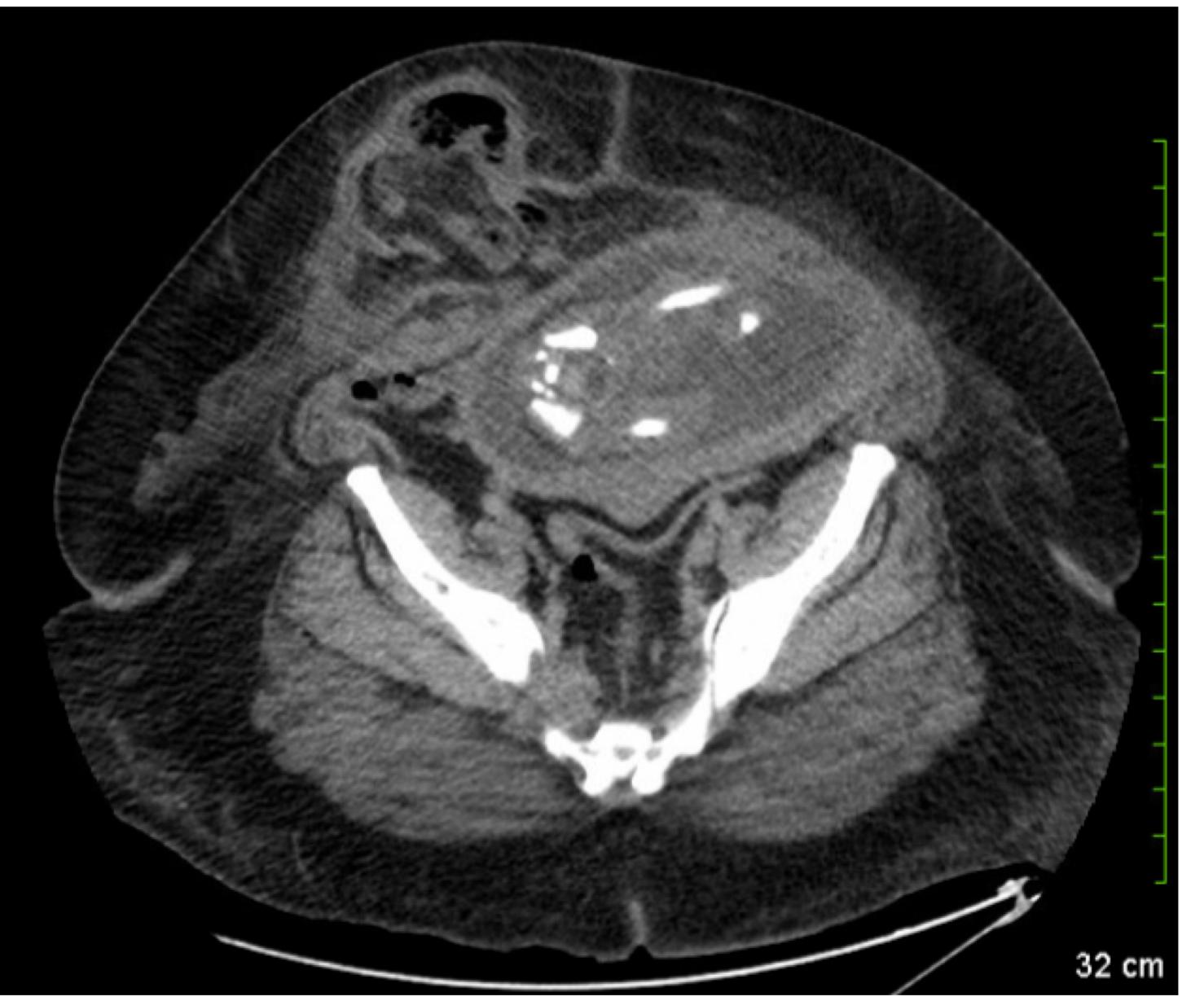
Patient Presentation

The patient is a multiparous 38 year old woman with history of morbid obesity and prior Cesarean section, estimated to be at 31 weeks gestation who presented with several days of persistent abdominal pain, nausea, vomiting, and obstipation. Lab results were unremarkable and CT imaging revealed a large right paramedian ventral incisional hernia containing distended loops of bowel.

Clinical Course

A trial of conservative management was initially attempted with bowel rest and nasogastric decompression. However, the patient failed to improve and developed worsening abdominal pain. After discussion between multiple medical specialties, including general surgery, obstetrics, and neonatology, the decision was made to proceed with operative management. The patient was taken to the operating room with the general surgery and obstetrics teams with plan for simultaneous Cesarean section and hernia repair. The general surgery team began the case and a midline laparotomy incision was made. The hernia contents were reduced and all the bowel appeared viable. The obstetrics team then proceed with Cesarean section and after delivery the baby was taken to the Neonatal Intensive Care Unit. The surgery team then performed an open ventral hernia repair with retro-rectus mesh placement. The patient's post-operative course was complicated by a mild ileus but was otherwise uncomplicated and her infant progressed well in the NICU. The patient was discharged home on post-operative day 17 and has been seen several times in follow-up for post-op surveillance and wound checks.

CT Imaging







Discussion

Bowel obstruction in pregnancy is a rare entity. When bowel obstruction does occur in pregnancy, it is most commonly due to adhesions from prior surgery. In instances of adhesive bowel obstruction, patients can often be managed conservatively with bowel rest and nasogastric decompression if there is no evidence of bowel ischemia. However, clinicians must also consider other causes of bowel obstruction in pregnant patients, such as hernia, volvulus, or malignancy, as operative intervention will likely be warranted. In these uncommon situations, general surgeons must recognize the need for an expedient approach as bowel obstruction in pregnancy has historically been associated with high rates of maternal and fetal morbidity and mortality. One series even reported a fetal mortality rate of 26%. Given the high risk to mother and fetus, surgeons must be able to recognize this rare problem and intervene when necessary.

Conclusion

• This case report demonstrates successful multi-disciplinary management of a bowel obstruction secondary to an incarcerated ventral incisional hernia during pregnancy.

References

- Dious A, Ndong A, Thiam O, Gueye M, Gueye MD, et al. An Incarcerated Hernia Complicated by Intestinal Obstruction During Pregnancy A Case Report. Medical Case Report: 2020 Volume 6 No. 2:141.
- 2. Jensen, K K; Henriksen, N.A. & Jorgensen, L.N. Abdominal Wall Hernia and Pregnancy: A Systematic Review. Hernia 19, 689-696 (2015). http://doi.org/10.1007/s10029-015-1373-6
- 3. Meyerson S, Holtz T, Ehrinpreis M, Dhar R (1995) Small bowel obstruction in pregnancy. Am J Gastroenterol 90: 299-301.
- 4. Sagi, Yair MD; Bussiere-Cote, Sophie MD; Meier, Kennedy BSc; Bischoff, Danielle MD, FRCSC; D'Souza, Rohan MD, MSc, MRCOG. Small Bowel Obstruction in Pregnancy: A Systematic Review [32F]. Obstetrics & Gynecology: May 2018 Volume 131 Issue p 72S doi: 10.1097/01.AOG.0000533342.62083.b9
- 5. Webster, PJ; Bailey, MA; Wilson, J; Burke, DA. Small Bowel Obstruction in Pregnancy is a Complex Surgical Problem with a High Risk of Fetal Loss. Annals of Royal College of Surgeons of England: July 2015 Volume 97 Issue 5 p 339-344 doi:10.1308/003588415X14181254789844

