

The case for magnetic resonance imaging in bowel obstruction during pregnancy



Intussusception in a pregnant woman with Roux-en-Y gastric bypass

Sebastien Moliere, MD; Victor Cavillon, MD; Yannis Mesli, MD

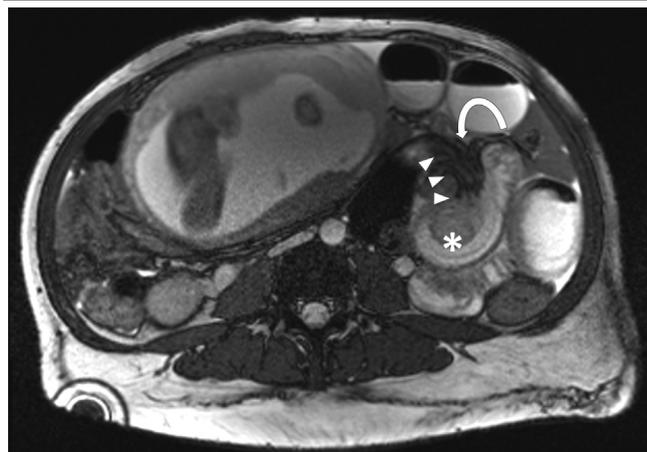
FIGURE 1
Coronal true fast imaging with steady state precession magnetic resonance imaging



Coronal true fast imaging with steady state precession magnetic resonance imaging (TrueFISP; Siemens Healthcare GmbH, Erlangen, Germany) shows marked jejunal dilation with submucosal edema in a bowel-within-bowel configuration (*star*) centered by mesenteric vessels (*arrowheads*) and intrauterine pregnancy.

Moliere. The case for MRI in bowel obstruction during pregnancy. *Am J Obstet Gynecol* 2019.

FIGURE 2
Axial true fast imaging with steady state precession magnetic resonance imaging



Axial true fast imaging with steady state precession magnetic resonance imaging (TrueFISP; Siemens Healthcare GmbH, Erlangen, Germany) shows mesenteric (*arrowheads*) entering into the jejunum (*star*). Entry point in marked by a *curved arrow*.

Moliere. The case for MRI in bowel obstruction during pregnancy. *Am J Obstet Gynecol* 2019.

Case notes

A 26-year-old pregnant woman with 27 weeks of amenorrhea had persistent abdominal pain and vomiting. Her surgical history was significant for Roux-en-Y gastric bypass 4 years earlier. Abdominal examination showed left-side tenderness. Ultrasound study showed no obstetric abnormality but could not identify the cause of the pain. Abdominal magnetic resonance imaging (Figures 1 and 2) showed a target sign centered by mesenteric vessels, diagnostic of jejunojejunal intussusception. The patient underwent exploratory laparotomy (Figure 3) that confirmed jejunojejunal intussusception that was managed successfully by simple manual reduction. After the surgery, there were neither sign of symptoms recurrence nor obstetric complication.

Conclusions

Bowel intussusception is a rare condition that is more frequent after gastric bypass. During pregnancy, when

From Strasbourg University Hospital, Strasbourg, France.

Received June 24, 2018; revised Aug. 1, 2018; accepted Aug. 7, 2018.

The authors report no conflict of interest.

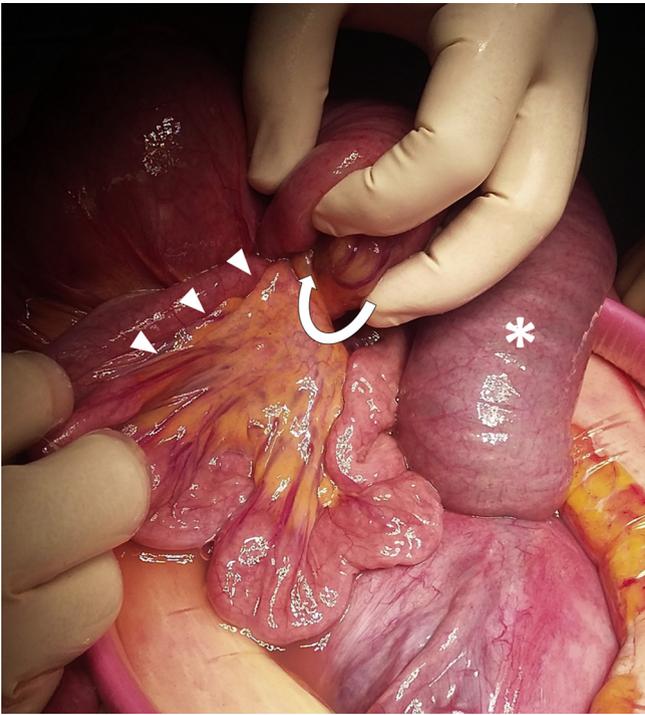
Corresponding author: Sebastien Moliere, MD. sebastien.moliere@chru-strasbourg.fr

0002-9378/\$36.00

© 2018 Elsevier Inc. All rights reserved.

<https://doi.org/10.1016/j.ajog.2018.08.010>

FIGURE 3
Intraoperative view of jejunojejunal intussusception



Intraoperative view of jejunojejunal intussusception where nondilated jejunal intussusciens and the mesentere (*arrowheads*) enter the intussusceptum (*curved arrow*) with upstream jejunal occlusion (*star*).

Molier. The case for MRI in bowel obstruction during pregnancy. Am J Obstet Gynecol 2019.

ultrasound imaging is not contributive, magnetic resonance imaging without the administration of gadolinium contrast is the most useful imaging examination for the exploration of nontraumatic acute abdomen, especially to detect and characterize bowel obstruction. ■

ACKNOWLEDGMENT

We are indebted to Marie-Noëlle Roedlich, MD for her contribution to this work.