# Rare cause of an inguinal mass in pregnancy

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I nguinal hernia is a common condition, and the hernial contents may vary. We describe a rare case of an incarcerated uterine fibroid diagnosed in a pregnant woman. The treatment was operative, and we were able to successfully reduce the fibroid and close the hernia.

## Case report

A 37-year-old woman presented at 15 weeks' gestation with a painful bulge in her left groin. She had first noticed the mass 2 weeks earlier, and it had been painless until the previous day. There had been no change in its size, and she was still passing flatus and having regular bowel movements, and she had no complaints of vomiting or abdominal distension.

Her relevant medical history included only uterine fibroids that were diagnosed during routine prenatal ultrasonography. The pregnancy otherwise had been uncomplicated.

On examination, she was afebrile, and her vital signs were all within normal limits. Abdominal examination revealed a soft, nondistended, scaphoid abdomen with a palpable uterus consistent with a gestational age of 15 weeks. A  $5 \times 5$ -cm firm and exquisitely tender mass was present in the left inguinal region. It overlay the deep inguinal ring and enlarged slightly when the patient coughed. The remainder of the physical examination was noncontributory.

We tried to reduce the mass while the patient was conscious but sedated, but the attempt was unsuccessful. Therefore we decided to carry out surgical exploration of the groin and repair the presumed hernia.

On exploration of the left inguinal region, we could see a mass bulging into the inguinal canal. We opened the peritoneum and found a fibroid, 7 cm in size, arising from the fundus of the gravid uterus. There were no signs of necrosis or intra-abdominal inflammation. After intraoperative obstetrical consultation, we reduced the fibroid into the abdomen and closed the inguinal canal. Obstetrical ultrasonography performed on the first postoperative day confirmed a single live intrauterine pregnancy. Subsequently the patient had an uncomplicated postoperative course, and she left the hospital several days later in good condition.

## Discussion

Inguinal hernias are a frequently encountered clinical problem, and their contents vary greatly. Commonly, contents include small- and large-bowel segments. Less frequently encountered contents include urinary bladder, uterine adnexae, appendix and Meckel's diverticulum; numerous other unusual examples have been described.<sup>1</sup>

An incarcerated fibroid presenting as an inguinal hernia is extremely rare. Only 4 cases have been reported in the literature.<sup>2-5</sup> Three of the 4 previous cases occurred during pregnancy, and all were treated surgically. Management strategies included fibroid reduction with defect closure, fibroid resection and total abdominal hysterectomy with hernioplasty.<sup>2-5</sup> The rationale behind the surgical decisions was not described in these cases. In our patient, because the fibroid appeared not to be strangulated and there was no sign of intra-abdominal inflammation, we elected to avoid resection and proceed with simple reduction and closure of the hernial defect.

#### Discussion

Inguinal hernias are a common clinical problem for general surgeons. The broad differential of hernial contents should include incarcerated uterine fibroids, particularly in the gravid patient. If this finding is encountered intraoperatively and the tissue is viable, reduction of the fibroid with closure of the hernial defect is a safe and reasonable management option.

Competing interests: None declared.

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Accepted for publication Jan. 16, 2008

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