

Volvulus During Coitus

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Serious injuries or surgical illnesses resulting from sexual intercourse are occasionally reported to help alert physicians to the diagnosis and management of these uncommon complications of coitus.¹ This report is the first of volvulus of the small bowel precipitated by sexual intercourse in a woman with previously unrecognized pelvic adhesive disease.

Case Report

A 46-year-old woman came to the emergency department complaining of severe, sharp, upper abdominal pain that had begun less than 1 hour earlier. The most notable aspect of her history was that the abrupt onset of this excruciating pain occurred within 5 minutes after coitus. The pain was the most severe she had ever experienced. She described it as steady, burning, and located vaguely in the upper abdomen without radiation. She had no history of abdominal surgery. Her medical history was unremarkable. Her obstetric history was gravida 2, para 2, aborta 0. Her last menses was 5 months prior to admission. She denied past gynecologic problems.

The patient was in extreme distress when first seen. On examination, she responded with moderate guarding to abdominal palpation, and she had mildly decreased bowel tones, but there was no mass, tenderness, or hernia. Results of a pelvic examination were normal except that lateral motion of the cervix elicited mild discomfort, which radiated to the area of her pain in the epigastrium but did not exactly reproduce her symptoms.

Admission laboratory data were as follows: leukocytes $17,300/\text{mm}^3$ with normal differential counts, hematocrit 40.3 percent, and normal serum amylase levels, erythrocyte sedimentation rate, and electrolytes. Findings on urinalysis were normal. A pregnancy test was negative. Results of abdominal radiographs showed no free air or

other abnormality. Findings of a chest radiograph were also normal.

At the time of admission the patient's pain seemed out of proportion to her physical signs, and findings on her abdominal examination were nonspecific. Her pain eased somewhat after about the first 2 hours. She was initially managed with close observation. A consulting general surgeon agreed that she did not need abdominal surgery and thought that bowel infarction and volvulus were unlikely, because of her absence of risk factors, particularly her lack of any previous surgery that would leave her with intra-abdominal adhesions. A perforated viscus was considered, but there was no evidence of free air in the abdomen. Findings from an upper gastrointestinal series were normal; she had no ulcer. A culdocentesis failed to obtain fluid. A pelvic sonogram showed no evidence of free fluid, ruptured ovarian cyst, or adnexal torsion. An abdominal sonogram showed no evidence of gallbladder disease or ureteral distention to suggest a stone. Repeated amylase and lipase measurements were normal, giving no suggestion of pancreatitis.

During the day of observation the patient's abdomen became slightly more tense and tender but not rigid, and she never developed rebound tenderness. She never developed a fever. She vomited oral fluids but did not show a pattern to suggest mechanical bowel obstruction. Her leukocytosis increased to $25,800/\text{mm}^3$. Repeated abdominal radiographs showed mild ileus and ascites. A barium enema was done to look for diverticular disease, but findings only suggested an anterior extrinsic rectal mass. Her mental status began to deteriorate, and she developed moderate tachycardia with postural hypotension. She was taken to the operating room within 24 hours of the onset of her symptoms with a preoperative diagnosis of abdominal pain of unknown cause.

Exploratory laparotomy showed a volvulus of the small bowel with an infarcted loop of ileum twisted around a prominent band of pelvic adhesive tissue. Approximately a 100-cm length of ileum extending to the ileocecal valve was infarcted. The adhesion around which this volvulus oc-

Submitted, revised, 21 September 1992.

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curred extended from the fundus of the uterus and the right fallopian tube to the right pelvic brim. The adhesion was lysed, and the necrotic segment of bowel resected. Postoperatively the patient did well. Only upon further questioning did the patient recall an episode many years previously of "infection in the tubes" treated with antibiotics.

Discussion

Pelvic adhesive disease secondary to pelvic inflammatory disease was the underlying cause of this patient's volvulus. Movement of the pelvic contents during sexual intercourse presumably precipitated the torsion of the small bowel around the adhesive band, which in turn led to vascular compromise and infarction of the bowel. A similar mechanism has been reported as the cause of hemoperitoneum from the tearing during intercourse of pelvic adhesions left from an earlier Cesarean section.²

In this case, the absence of any history of abdominal surgery led to decreased suspicion of peritoneal adhesions and their attendant risk of bowel obstruction or volvulus. The immediate onset of her pain following coitus suggested a gynecologic disorder, but her negative history and pelvic examination provided little support. Her physical and laboratory findings were nonspecific

initially and remained so despite the patient's deterioration. In retrospect, the character of this woman's pain could have given the best hint to her diagnosis. The pain was immediate, severe, and out of proportion to her findings on examination, all subtle suggestions of the difficult diagnosis of bowel infarction. More pointed investigation of the patient's history for pelvic inflammatory disease might have provided a clue to the possible presence of adhesions that would have aided diagnosis and prompted surgical exploration in this case.

Physicians evaluating acute abdominal pain in women, particularly if the onset of pain follows coitus, should consider the possibility of pelvic adhesions, even in patients who have had no previous surgery. The rising rate of pelvic inflammatory disease among sexually active women and the resultant increasing occurrence of pelvic adhesive disease can make complications, such as reported here, more than mere curiosities.

References

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2. Ferrara BE, Murphy WM Jr. The pains of love: hemoperitoneum following sexual intercourse. *JAMA* 1986; 255:1708-9.