A 23-year-old woman, gravida 8, para 3, with a last menstrual period 3 months before and an intrauterine device (IUD) placed 2 months before, presented to the emergency department with crampy lower abdominal pain and vaginal discharge for 1 day. She denied fever, chills, back pain, or urinary symptoms. Her vital signs were notable for a low-grade fever (100.0 °F-37.8°C). Her physical examination was notable for mild bilateral lower abdominal tenderness, a purulent discharge from the cervical os with no visible IUD strings, and uterine tenderness. A urine pregnancy test was positive. Her WBC count was $24.4 \times 10^9$/L, and $\beta$-human chorionic gonadotropin was 188,087 mIU/mL.


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Figure. Transvaginal pelvic ultrasound showing coronal image through the uterus. Used with permission of Christopher Fee, MD, Division of Emergency Medicine, Department of Medicine, University of California, San Francisco Medical Center, San Francisco, CA.

For the diagnosis and teaching points, see page e2.

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DIAGNOSIS:

Intrauterine twin gestation with single live intrauterine pregnancy, single septic abortion, and an IUD. Transvaginal pelvic ultrasonography revealed a twin intrauterine gestation, with twin 1 adjacent to the internal cervical os, twin 2 positioned superiorly, and an IUD between them (Figure). Twin 1 had no surrounding amniotic fluid or cardiac motion. Twin 2 was an anatomically normal, with a normal pulse rate. Intravenous antibiotics were administered. The patient spontaneously aborted both fetuses the next morning.

Septic abortions occur when retained products from spontaneous or therapeutic abortions become infected, usually with mixed vaginal flora or sexually transmitted bacteria such as *Escherichia coli* and other aerobic, enteric, and Gram-negative rods; group B β-hemolytic streptococci; staphylococcal organisms; and *Bacteroides* species, *Neisseria gonorrhoeae, Chlamydia trachomatis, Clostridium perfringens, Mycoplasma hominis*, and *Haemophilus influenzae*. IUDs and medical termination have been associated with septic abortions. Pelvic inflammatory disease is the most common complication. Septic abortion was once the leading cause of maternal death worldwide, mostly because of illegal abortions. Mortality increases with gestational age. Women of childbearing age presenting with fever, abdominal pain, vaginal discharge, or bleeding should be evaluated for possible septic abortion with thorough examinations, laboratory testing, and imaging. Ultrasonography may identify intrauterine-retained products of conception, adnexal masses, or free pelvic fluid. Consult obstetrics and gynecology personnel if the diagnosis is considered.

Early, broad-spectrum antibiotics and prompt uterine evacuation are recommended. Laparotomy may be required in cases of treatment failure, with hysterectomy reserved for severe uterine perforation, bowel injury, clostridial myometritis, and pelvic abscess.

REFERENCES