Point of care ultrasonography (POCUS) in diagnosing ruptured ectopic pregnancy

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A 28-year female presented to the emergency department (ED) for 1 day of severe abdominal pain, vaginal bleeding, and syncope. Last menstrual period was unknown. Vital signs included a heart rate of 80 bpm and blood pressure of 73/46 mmHg. She was moaning in distress and had diffuse tenderness with guarding and distention. On pelvic exam there was scant blood, a closed os, and adnexal tenderness. A bedside ED ultrasound revealed free fluid in the abdomen, no intrauterine pregnancy, and a heterogenous mass in the adnexa, concerning for a ruptured ectopic pregnancy with hemoperitoneum (Images 1 – 3). The OB/GYN service was consulted. Urine pregnancy test was positive and hemoglobin was 7 g/dl. After resuscitation for hemorrhagic shock, she was taken for an emergent exploratory laparoscopy. Findings confirmed a 3.5 cm ruptured ectopic pregnancy with hemoperitoneum (1.5 l blood). A left salpingectomy was performed and she recovered uneventfully.

References

1. Stein J.C., Wang R., Adler N., et al: Emergency physician ultrasonography for evaluating patients at risk for ectopic pregnancy: a meta-analysis. Ann Emerg Med 2010; 56: pp. 674-683

2. Moore C., Todd W.M., et al: Free fluid in Morison's pouch on bedside ultrasound predicts need for operative intervention in suspected ectopic pregnancy. Acad Emerg Med 2007; 14: pp. 755-758
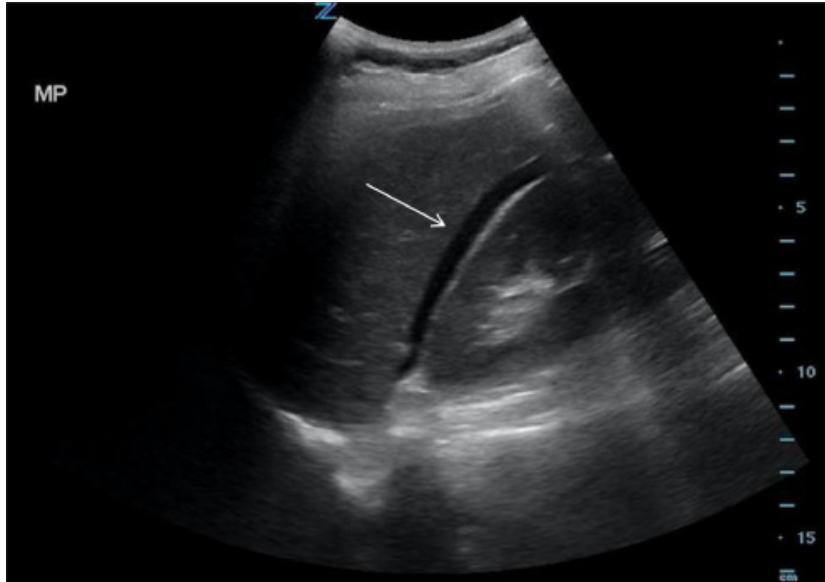
Figures

Image 1
Transabdominal ultrasound image of hepatorenal recess (Morison's pouch) demonstrating free intraperitoneal fluid stripe (arrow).
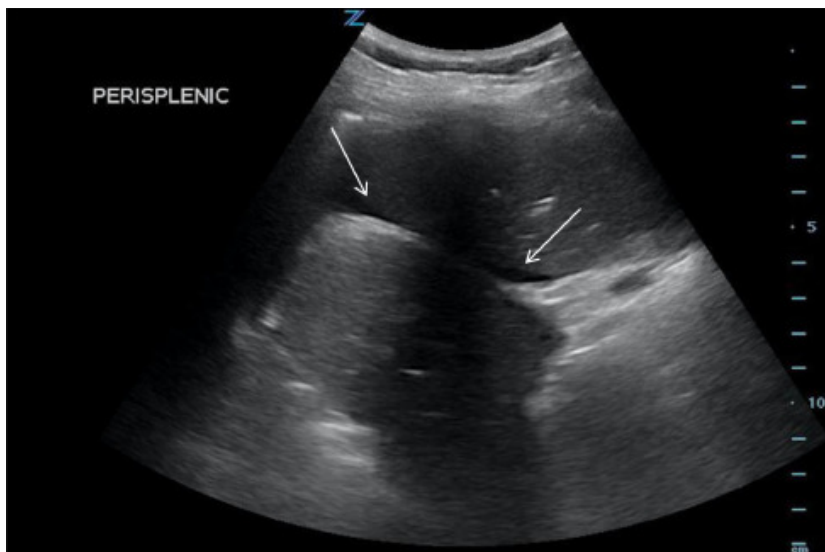

Image 2
Transabdominal ultrasound image of perisplenic space demonstrating free intraperitoneal fluid stripe (arrows).
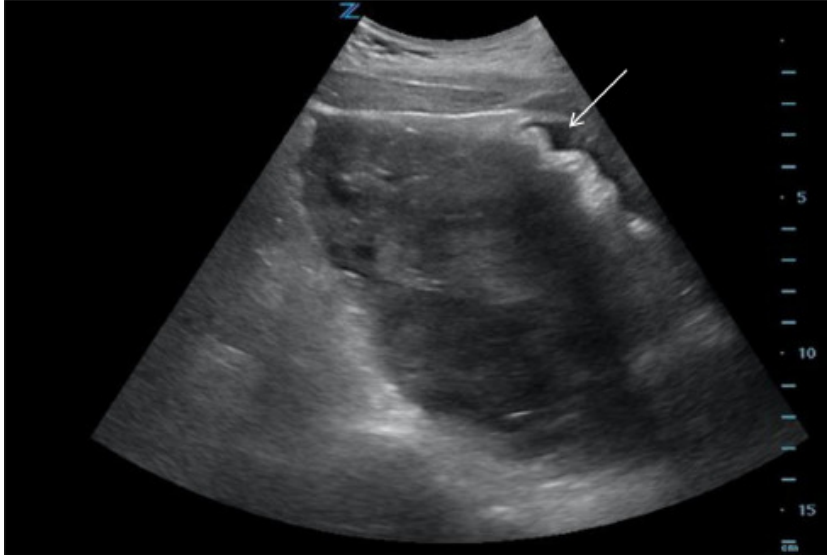
Image 3
Transabdominal ultrasound image of pelvis (left adnexal region) demonstrating a heterogeneous collection with free fluid (arrow) and clot.