

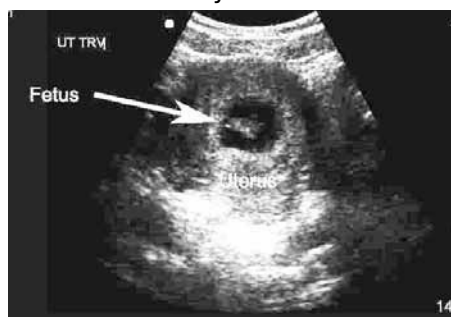
b. Pelvic ultrasound

- (1) Transabdominal sonography (TAS) is most useful in establishing the presence of an intrauterine pregnancy (IUP) and excluding an ectopic based on the low risk of heterotopic pregnancy in women who are not undergoing treatment for infertility. Visualization of a yolk sac (within the gestational sac) is the earliest reliable sign of an IUP.
- (2) Transvaginal ultrasonography is an extremely sensitive technique; it can identify landmarks consistent with a normal IUP at 5 weeks of gestation and may occasionally identify the actual ectopic.
- (3) Indeterminate ultrasounds (positive HCG but no definite IUP or extra-uterine findings of ectopic) occur in up to 20% of ED patients undergoing evaluation for first-trimester emergencies. Less than 30% of these go on to normal IUPs.

Empty uterus with a yolk sac in the left adnexa (ectopic)



Normal intrauterine pregnancy with a fetus surrounded by the uterus



Courtesy Sandy Werner, MD, RDMS, FACEP

c. Management of vaginal bleeding or pain in the stable first-trimester pregnant patient

- (1) Sonography (transvaginal or transabdominal US) at the time of visit or within 48 hours
- (2) Ectopic pregnancy
 - (a) Obtain quantitative human chorionic gonadotropin (HCG)
 - (b) Consult OB
 - (c) Consider methotrexate therapy versus surgery
- (3) Indeterminate
 - (a) Obtain quantitative HCG
 - 1 $> 1,500$ HCG
 - a Consult OB
 - b Serial HCGs to establish ectopic pregnancy or miscarriage
 - 2 $< 1,500$ HCG
 - a If clinically benign, consult OB, follow serial HCGs, repeat US in two days or when HCG is $> 3,000$ for transvaginal US
 - b Assess clinical acuity
 - (b) Assess clinical acuity
- (4) Intrauterine pregnancy
 - (a) Follow up with OB
 - (b) Threatened miscarriage precautions