

The Instructional Case Study

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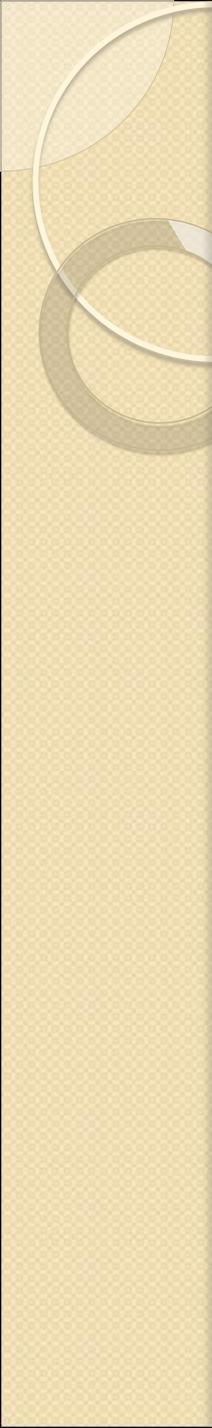


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Objectives

At the end of this session, the participant should be able to:

- Define or describe an instructional case study
- Discuss advantages and disadvantages of the instructional case study
- Understand how an instructional case study is delivered to a class based on the demonstration
- Understand how an instructional case study is structured and be able to create one to be used for teaching lower level medical students



Definition of Instructional Case Study

A case presentation for early clinical learners on a specific, well-defined topic meant to introduce and illustrate basic concepts.

(This is the most directive of the Case-based methods we will present.)

Student preparation

- Assigned readings
- Pre-read case
- Answer questions ahead of class

OR

A didactic portion followed by small group preparation and larger group discussion

Instructional Case Study

Tailor the complexity of the case to the level of the learner.

(Can use hypothetical or real case, but the earlier the learner, the more simplified the case needs to be.)



First Trimester Bleeding

At the end of this case, the student will be able to:

- Define risk factors for abnormal pregnancy, and develop a differential diagnosis for vaginal bleeding in the 1st trimester.
- Order appropriate tests to differentiate normal and abnormal pregnancy
- Organize a management plan based on results of the above tests.
- Counsel a patient with an ectopic pregnancy or miscarriage regarding treatment plan and recurrence risk.

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Our Patient

Sheila E. is a 28 yr old G2P1001 who presents to the Ob/Gyn clinic for an unscheduled visit for vaginal bleeding after a positive uHCG at home. Her LMP was 5wk4days ago. It is a wanted pregnancy. She is worried something might be wrong.



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What is the differential diagnosis of 1st Trimester Bleeding?

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- Normal pregnancy
- Ectopic pregnancy
- Spontaneous miscarriage
- Vaginal/cervical neoplasia of polyp
- Gestational trophoblastic disease
- Sexually transmitted disease (Chlamydia)
- Nongenital bleeding

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Welcome

What are the risk factors for ectopic pregnancy?

- Previous pelvic infection
- Previous Ectopic pregnancy or tubal surgery
- Assisted reproductive technologies (ART)
- In utero DES exposure
- Pregnancy with current IUD
- Smoking

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What are the risk factors for miscarriage?

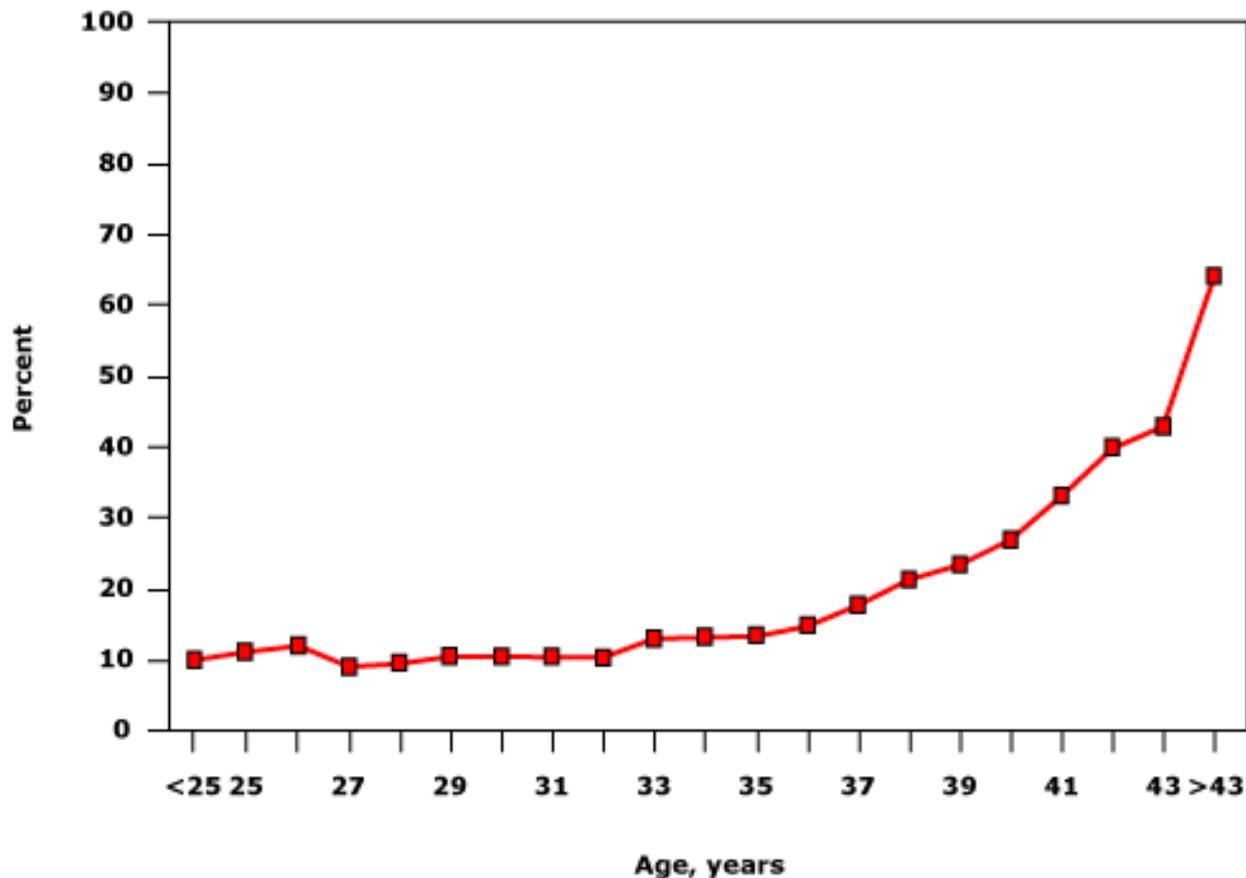
- Endocrine disorders (Diabetes, PCOS or hyperthyroidism)
- Substance use: cocaine, tobacco, large caffeine intake
- Previous thrombotic event
- Previous abnormal pregnancy (birth defects or anomalies)



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Maternal Age and Risk of SAB





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Ms. E has a prior full term pregnancy with vaginal delivery and a healthy daughter. Her medical history is negative. Her gyn history is notable for chlamydia in the past, not associated with pelvic pain. She has had no prior surgeries, and was not undergoing infertility treatment. She smokes 1/2ppd (and is trying to quit) she rarely has a glass of wine, and doesn't use illicit drugs.



Define the different types of miscarriage.

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- Threatened miscarriage
- Inevitable miscarriage
- Delayed miscarriage or Embryonic demise
- Incomplete miscarriage
- Complete miscarriage
- Recurrent miscarriage

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Ms. E's quant HCG was 1760, Her HCT was 35 and she is Rh positive. Her ultrasound report read as follows: Abdominopelvic u/s reveals uterus with thickened endometrium and gestational sac vs. pseudosac. In the right adnexa, a 3cm corpus luteum cyst is noted with a small amount of fluid in the cul-de-sac. Neither intrauterine gestation nor ectopic pregnancy can be excluded at this time; clinical correlation is suggested.



Patient Ultrasound Results

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Image of the patient's Ovary

A 3cm corpus luteum cyst is noted with a small amount of fluid in the cul-de-sac. Neither intrauterine gestation nor ectopic pregnancy can be excluded at this time; clinical correlation is suggested.



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What are the treatment options for ectopic and spontaneous miscarriage?

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Scenario A:

A decision was made to wait for a follow up HCG. 2 days later her HCG is 2500, and her Hct is stable at 35. A repeat u/s now reads: No intrauterine gestation is seen A complex mass is now noted in the right adnexa measuring 2 x 2.3cm. The fluid in the cul-de-sac has slightly increased.



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Scenario A

No intrauterine gestation is seen. **A** complex mass is now noted in the right adnexa measuring 2 x 2.3 cm. The fluid in the cul-de-sac has slightly increased.





Scenario A

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What are the treatment options for Ectopic and spontaneous miscarriage?

Scenario B:

A decision was made to wait for a follow up HCG. Two days later her quantitative HCG is 2500, and her hematocrit is stable at 35. A repeat u/s now reads: There is an irregular gestational sac with no yolk sac. A fetal pole is seen c/w 6w0d, there is no fetal cardiac activity seen.

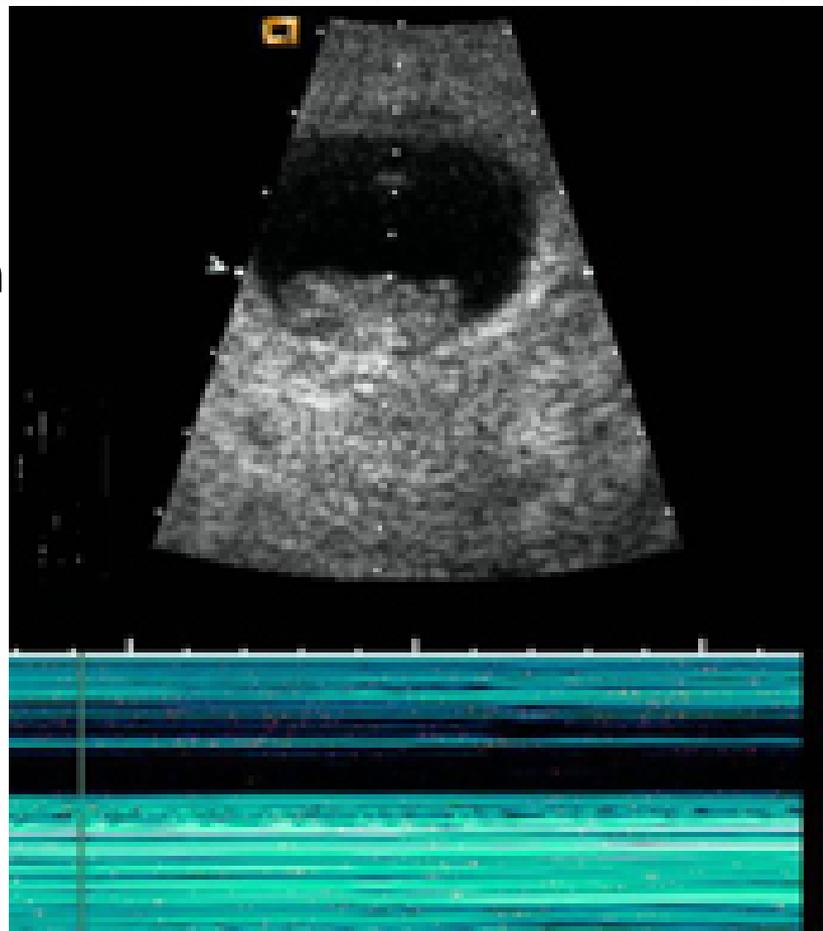
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Scenario B

There is an irregular gestational sac with no yolk sac. A fetal pole is seen c/w 6w5d, there is no fetal cardiac activity seen.



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What are the treatment options for Ectopic and spontaneous miscarriage?

Scenario C:

A decision was made to wait for a follow up HCG. 2 days later her HCG is 4065, and 4 days later it is 8004. A repeat ultrasound is performed. A viable intra-uterine pregnancy is noted. There is a yolk sac and a fetal pole measuring 7mm. FH rate is 162.

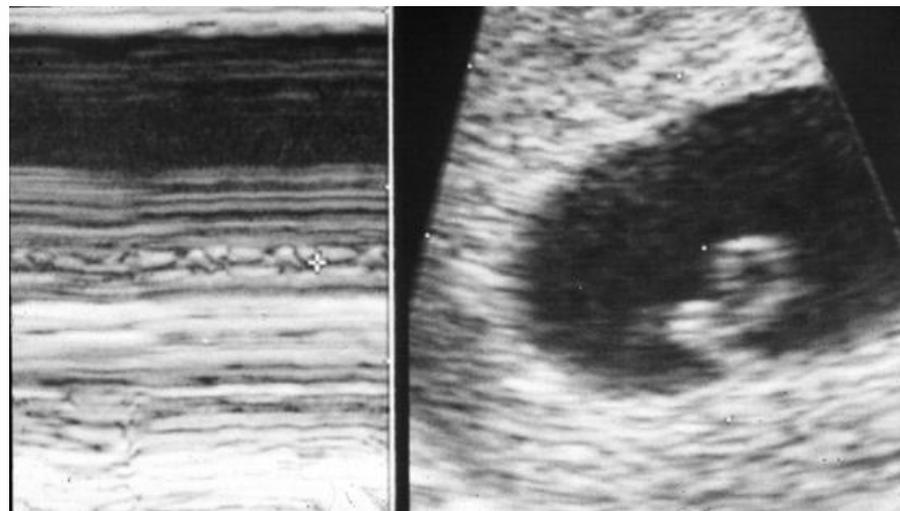
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Scenario C

A viable intra-uterine pregnancy is noted.
There is a yolk sac and a fetal pole measuring 7mm. FH rate is 162.



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**What Are The Advantages
And Disadvantages Of
Instructional Case Study?**

Instructional Case Study: Advantages

- Great to use in small groups to supplement the learning in a clinical experience
- Can be used in larger groups—enhanced by use of lists on a chalk board.
- Easy to prepare for various teaching faculty to use with little preparation

Instructional Case Study: Disadvantages

- Requires minimal critical thinking
- Over-simplified case may not illustrate real-life complexities
- More directive in nature, less self-motivated learning

Instructional Case Study: Creating the lesson

- Pick a well defined topic
- Consider the main learning points of that topic
- Write a simple case which illustrates the main learning points.
- Compose questions to encourage student discovery of main learning points.
- Choose reading materials which will serve as a learning tool and resource for answering questions.

Easy Main Learning Points

- Risk Factors
- Differential Diagnosis
- Physical Findings
- Evaluation
- Treatment
- Counseling

Instructional Case Study: Tips

- Keep the session interactive
- Don't let one or two students dominate the discussion
- Have students answer first, show the slides second
- Require students to raise their hands
- Method can be done without PowerPoint slides by using a chalk board or white board.

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At the end of this session, the participant should be able to:

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