

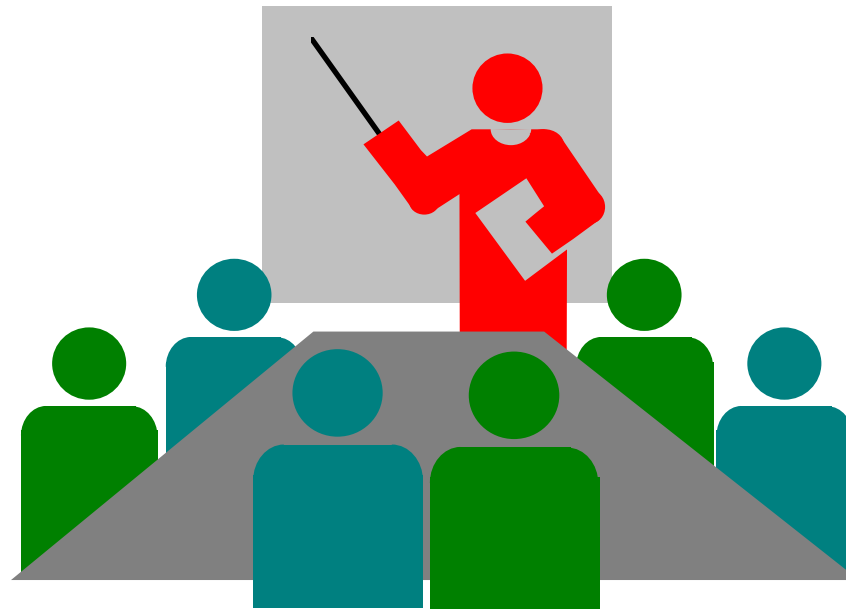
# Abortion and Ectopic Pregnancy

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# Introduction

- Spontaneous Abortion
- Elective Abortion
- Ectopic Pregnancy

# Spontaneous Abortion

- Incidence-1 in 5 pregnancies
- 80% occur in the first trimester
- Incidence decreases with gestational age
- If fetal heart activity/viability is noted on ultrasound, the loss rate is only 2-3%
- Loss rate is 20% in those with first trimester bleeding
- Risk increases with increasing maternal age, paternal age, and parity

# Spontaneous Abortion

- Etiology-

- ◆ Maternal factors

- ☞ Infectious-Mycoplasma, Toxoplasmosis, Listeria

- ☞ Environmental-Alcohol abuse, Smoking

- ☞ Uterine-Septum, Fibroids, Synechiae, Cervical Incompetence

- ☞ Systemic Disease-Thyroid, Diabetes

- ◆ Paternal factors-Chromosomal translocation

- ◆ Fetal Factors-Chromosomal

- ☞ 50% of 1st trimester abortions caused by chromosomal anomalies

# Spontaneous Abortion- Symptoms

- Vaginal bleeding in almost all patients
- Cramping and pelvic pain very common
- Hemorrhage can lead to syncope from hypovolemia/shock
- Often discovered when fetal heart activity cannot be detected on exam

# Spontaneous Abortion

- Differential Diagnosis
  - ◆ Threatened Abortion-bleeding, cervix closed
  - ◆ Inevitable Abortion-cervix open or membranes ruptured
  - ◆ Complete Abortion-passed all products of conception (P.O.C.)
  - ◆ Incomplete Abortion-passed some of the P.O.C.
- Treatment
  - ◆ Suction Dilatation and Curettage or Observation

# Induced Abortion

- More complicated the further along in pregnancy the procedure is done
- Dilatation and Curettage until 12 weeks then Dilatation and Evacuation
- Medical Rx possible until 9 weeks
  - ◆ RU-486 (mifepristone)/Misoprostil
  - ◆ Methotrexate/Misoprostil

# Induced Abortion

- Complications
  - ◆ Perforation of uterus
  - ◆ Infection
  - ◆ Hemorrhage
  - ◆ Post Abortal Syndrome
- Septic Abortion
  - ◆ Sepsis, shock, hemorrhage
  - ◆ Follows infected complete or incomplete AB
  - ◆ More common before induced abortion was legalized



# Ectopic Pregnancy

- Pregnancy anywhere outside uterine cavity
- Fallopian tube most common location
- Second leading cause of maternal mortality
- Risk Factors
  - ◆ Pelvic inflammatory disease, Age, Previous Ectopic, Previous tubal ligation
- Symptoms
  - ◆ Abdominal pain, vaginal bleeding, syncope, amenorrhea
  - ◆ Occurs 5-8 weeks after last menstrual period

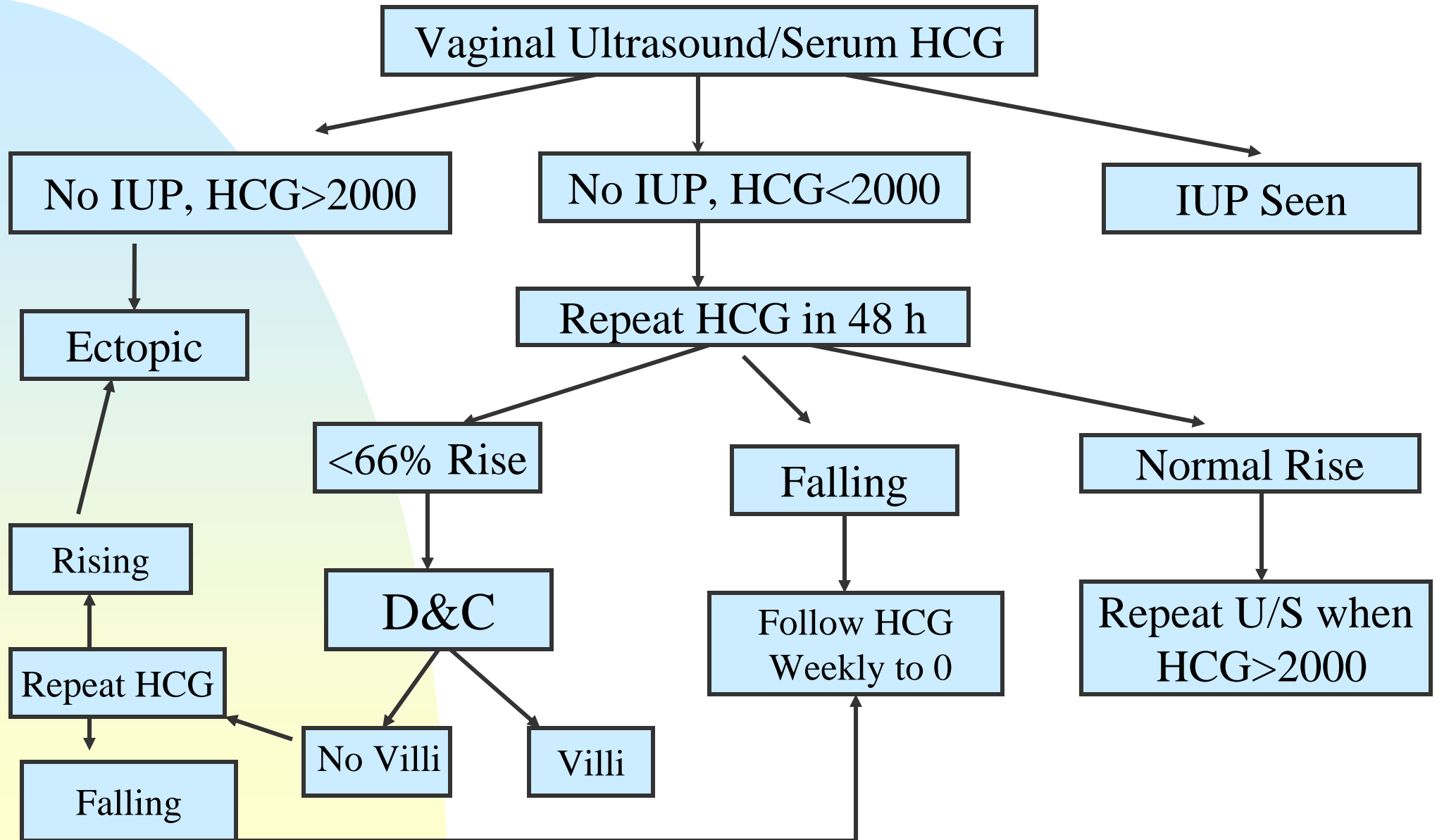
# Ectopic Pregnancy

- Physical Findings
  - ◆ Hypotension, tachycardia(shock)
  - ◆ Adnexal mass or tenderness in adnexa
  - ◆ Uterus-normal size
  - ◆ Peritoneal Signs
- Diagnostic Tests
  - ◆ Quantitative serum pregnancy test
  - ◆ Ultrasound
  - ◆ Culdocentesis

# Ectopic Pregnancy

- Diagnostic Algorithm-Key Points
  - ◆ HCG > 2000, IUP visible on Transvaginal Ultrasound
  - ◆ HCG rises by 66% in 48 hours in viable IUP
  - ◆ Suction Dilatation and Curettage (D&C)-  
Absence of villi points to ectopic
    - ☞ Can put uterine contents into saline and look for villi by gross inspection

# Ectopic Algorithm



# Ectopic Pregnancy

- Management-determine hemodynamic stability
  - ◆ Medical
    - ☞ Methotrexate-unruptured, small, no cardiac activity, compliant patient
  - ◆ Surgical
    - ☞ Laparoscopy
      - Salpingostomy
      - Salpingectomy
    - ☞ Laparotomy

# Ectopic Pregnancy: Prognosis for Subsequent Fertility

- Overall subsequent pregnancy rate is 60%, other 40% are infertile
- One-third of pregnancies after an ectopic pregnancy are another ectopic pregnancy, one-sixth are spontaneous abortions
- Only 33% of women with ectopic pregnancy will have a subsequent live birth

# Ectopic Pregnancy- Unusual Variants

- Heterotopic Pregnancy
  - ◆ Simultaneous IUP and ectopic gestations
  - ◆ Rare- 1 in 30,000 pregnancies
- Abdominal Pregnancy-can occur anywhere in peritoneal cavity (1 in 3000)
- Cervical Pregnancy (1 in 10,000)
  - ◆ May need hysterectomy
- Ovarian Pregnancy (1 in 7,000)
  - ◆ Oophorectomy usually required