

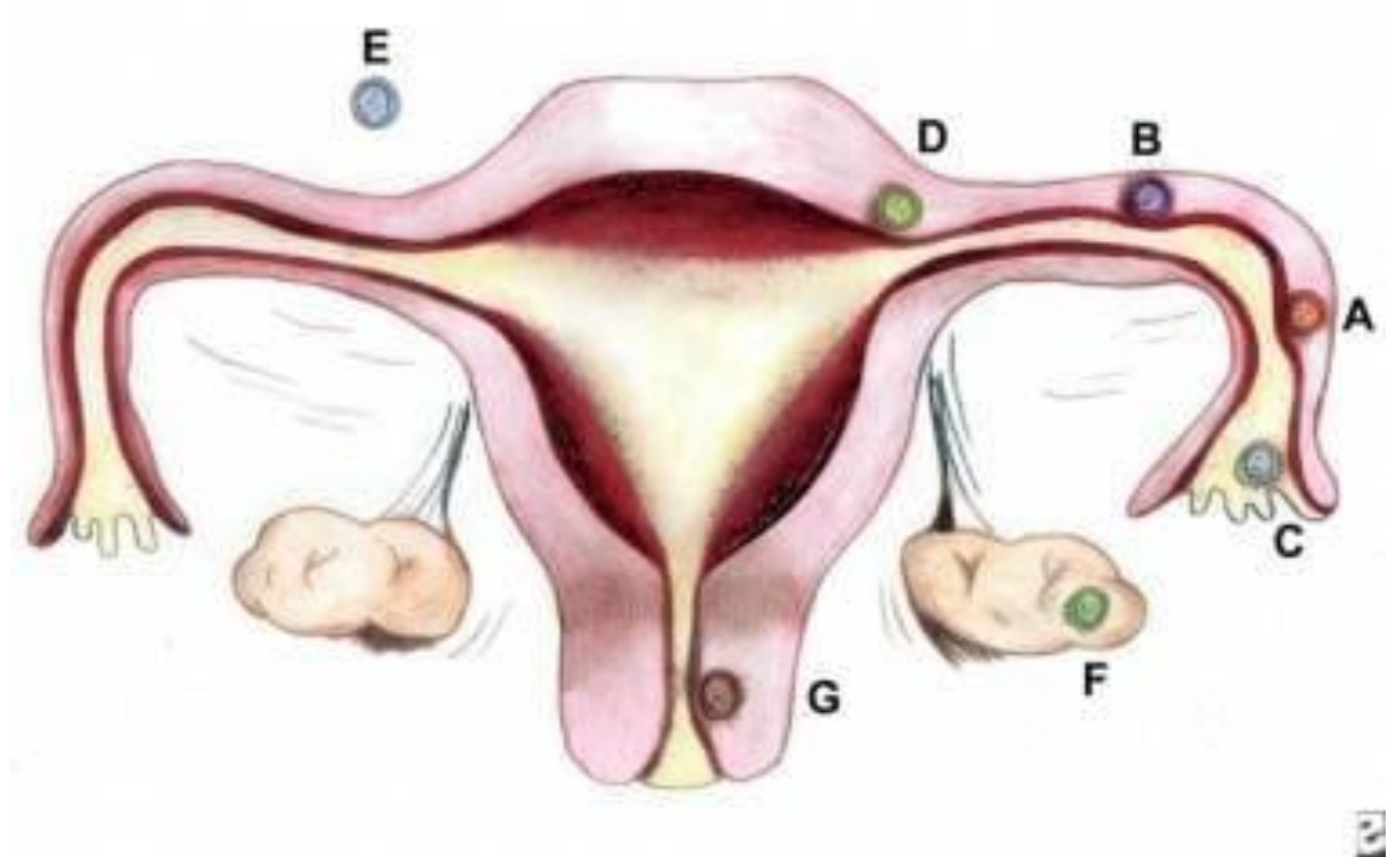
An anatomical illustration of a female reproductive system in cross-section. The uterus is shown on the right, and the fallopian tube is on the left. An embryo is implanted in the fallopian tube, which is an ectopic pregnancy. The embryo is surrounded by a blue amniotic sac and a red placenta. The fallopian tube is shown with its internal structure, including the uterine tube and the uterine artery and vein. The uterus is shown with its internal structure, including the uterine cavity and the uterine artery and vein. The illustration is in a realistic style with various colors like pink, red, blue, and yellow.

Ectopic Pregnancy

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Ectopic Pregnancy

- Tubal
- Ovarian
- Cervical
- Cesarean scar
- Outside Reproductive tract



Risk Factors

Previous Ectopic

Previous Pelvic Infections (PID)

Fertility Treatment

Tubal Surgery

Contraception

Smoking

Age

50% OF ALL EP
HAVE NO
IDENTIFIABLE
RISK FACTORS

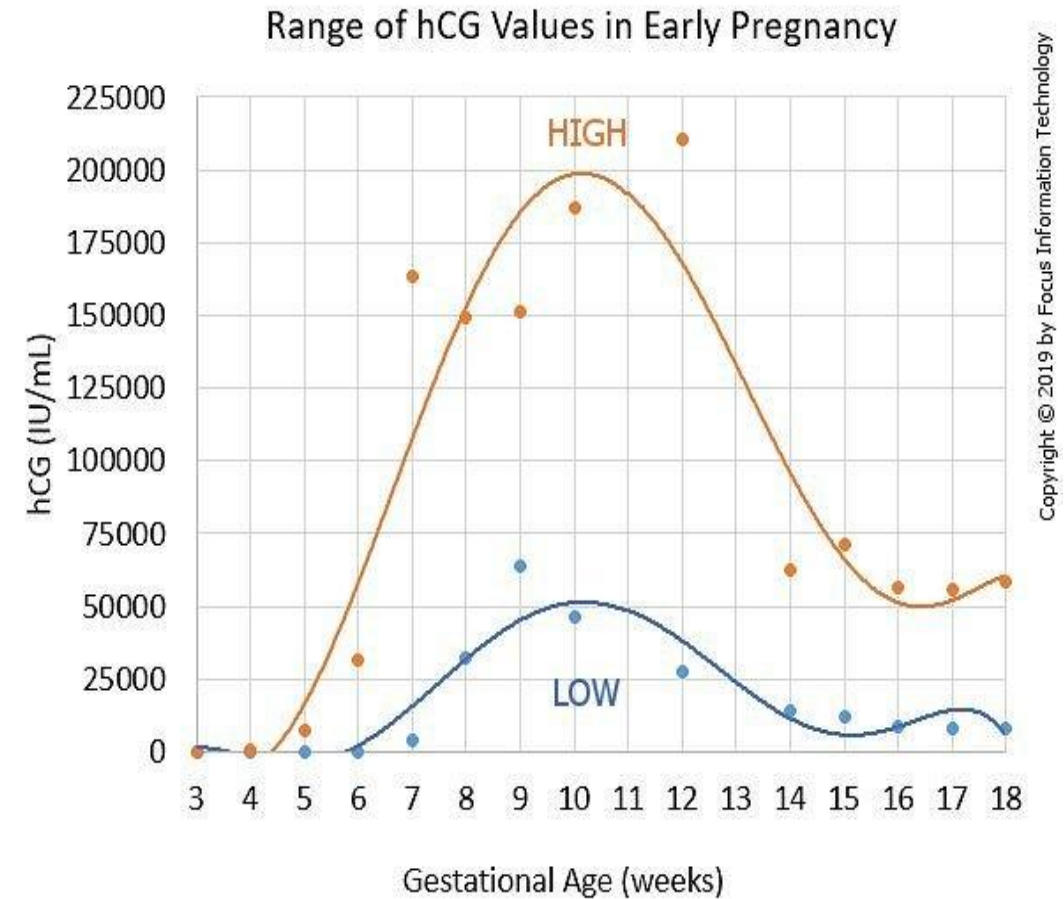


Ultrasound

- GS+YS/embryo (unlikely)
- Mass with hyperechoic area



- At least 49% rise in HCG value: <1500 HCG
- 40% for an initial hCG level of 1,500–3,000 mIU/mL
- 33% hCG level greater than 3,000 mIU/mL





Treatment Options

Confirmed or Suspected EP

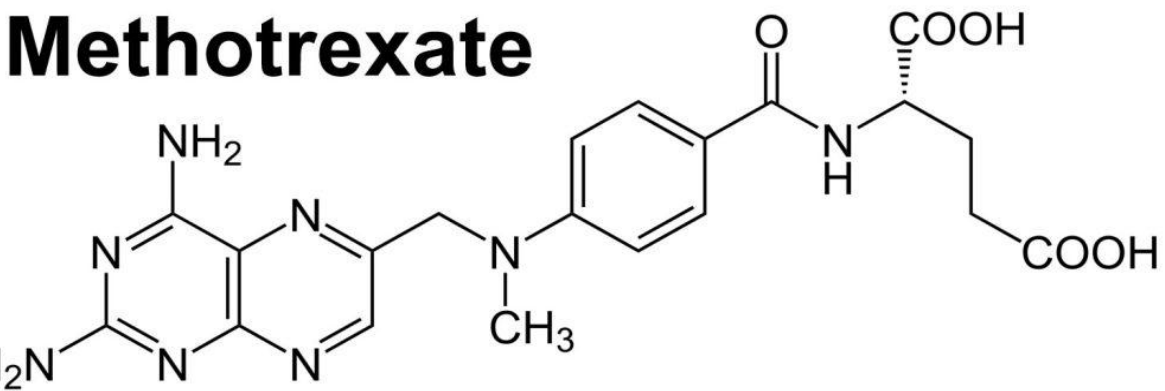
Low HCG levels (<200)

Understand risks

Ready access to medical facility

Able and willing to have close follow up

Methotrexate



- DHFR Inhibitor
- 70-95% success rate
- Appropriate Candidates
- Counseling and Follow up

MTX Single Dose

50 mg/m² intramuscularly on day 1

Measure hCG level on posttreatment day 4 and day 7

If the decrease is **greater than 15%**, measure hCG levels weekly until reaching nonpregnant level

If decrease is **less than 15%**, readminister methotrexate 50 mg/m² IM and repeat hCG level

If hCG does not decrease after two doses, consider surgical management

If hCG levels plateau or increase during follow-up, consider administering methotrexate for treatment of a persistent ectopic pregnancy

MTX Two Dose

50 mg/m² intramuscularly on day 1

second dose of methotrexate at a dose of 50 mg/m² intramuscularly on day 4

Measure hCG level on posttreatment day 4 and day 7

If the decrease is greater than 15%, measure hCG levels weekly until reaching nonpregnant level

If decrease is less than 15%, readminister methotrexate 50 mg/m² intramuscularly on day 7 and check hCG levels on day 11

If hCG levels decrease 15% between day 7 and 11, continue to monitor weekly until reaching nonpregnant levels

If the decrease is less than 15% between day 7 and 11, readminister dose of MTX 50 mg/m² intramuscularly on day 11 and check hCG levels on day 14

If hCG does not decrease after four doses, consider surgical management

If levels plateau or increase during follow-up, consider administering methotrexate for treatment of a persistent ectopic pregnancy

Fixed Multidose

Administer MTX **1 mg/kg IM** on days **1, 3, 5, 7**; alternate with **folinic acid 0.1 mg/kg IM** on days **2, 4, 6, 8**

Measure hCG levels on methotrexate dose days and continue until hCG has decreased by 15% from its previous measurement

If the decrease is greater than 15%, discontinue administration of methotrexate and measure hCG levels weekly until negative (may ultimately need one, two, three, or four doses)

If hCG does not decrease after four doses, consider surgical management

If hCG levels plateau or increase during follow-up, consider administering methotrexate for treatment of a persistent ectopic pregnancy

Absolute Contraindications

- Intrauterine pregnancy
- Immunodeficiency
- Moderate to severe anemia, leukopenia, or thrombocytopenia
- Sensitivity to methotrexate
- Active pulmonary disease
- Active peptic ulcer disease
- Clinically important hepatic dysfunction
- Clinically important renal dysfunction
- Breastfeeding
- **Ruptured ectopic pregnancy**
- **Hemodynamically unstable patient**
- **Inability to participate in follow-up**

Relative Contraindications

FCA detected by
TVUS

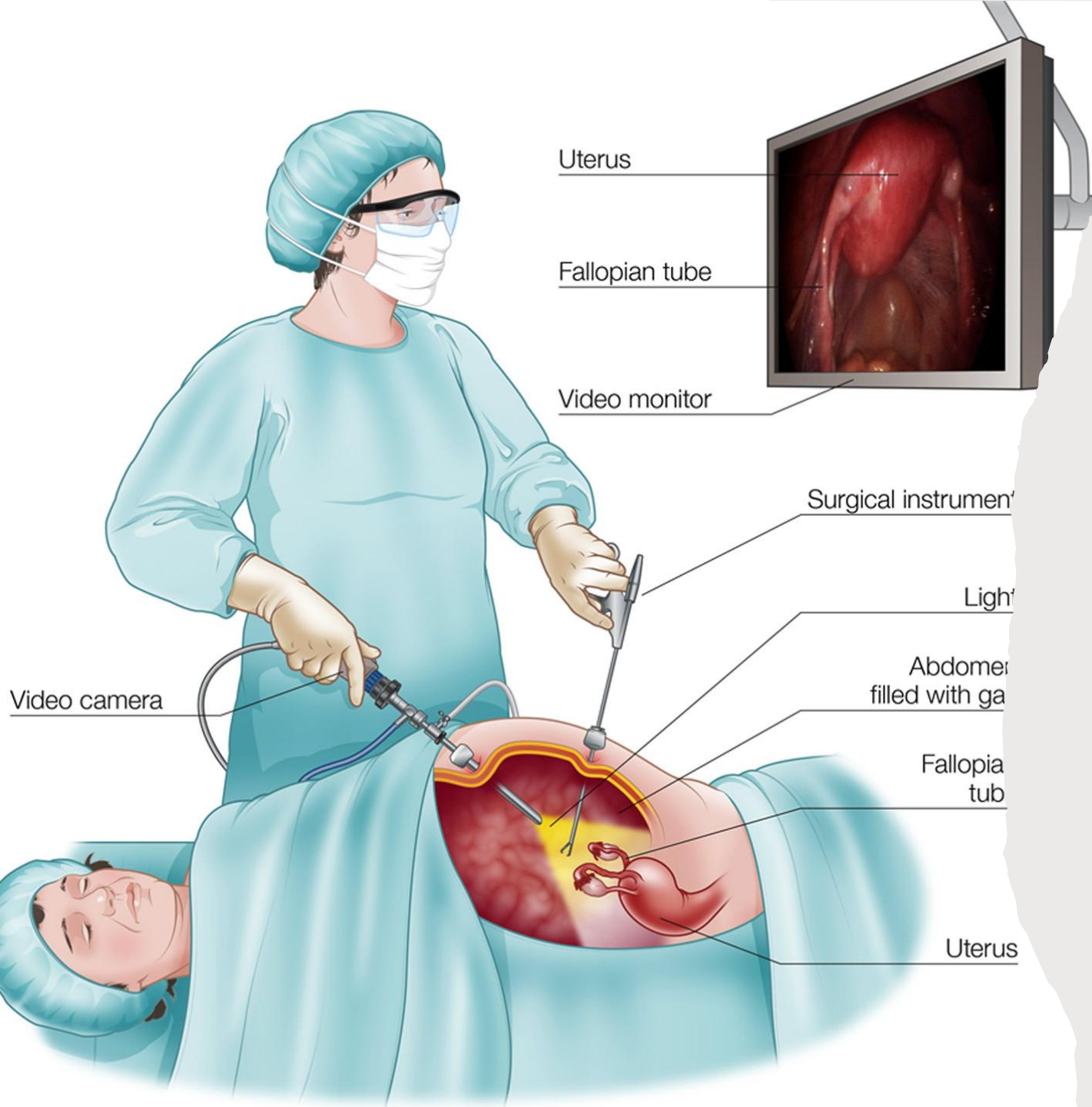
High initial hCG
concentration
(**>5000mIU/mL**)

Ectopic
pregnancy **>4 cm**
in size on TVUS

Refusal to accept
blood transfusion

Surgery

- Salpingectomy vs Salpingostomy

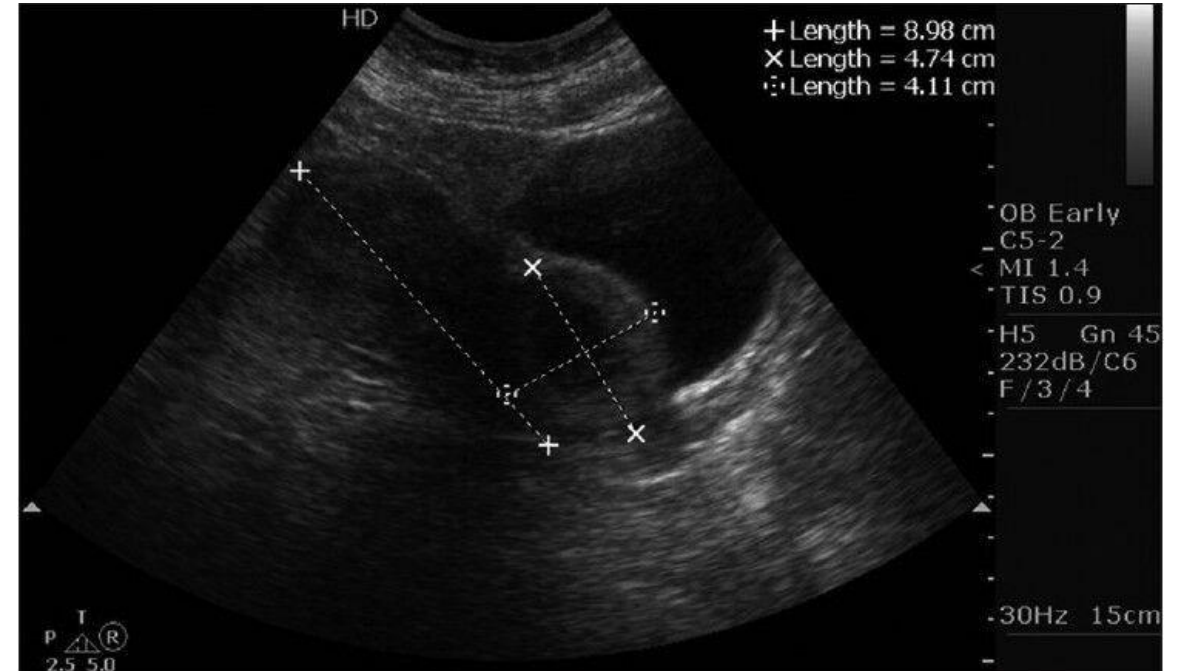


Cervical Ectopic

- 1:9,000
- Below level of internal os
- Significant Risk for hemorrhage

Distinguishing features

- Blood flow to pregnancy or cardiac activity noted
- Sac will have regular contour
- Echogenic rim in EP
- Sliding sac sign absent



Cesarean Scar Ectopic

- 1:2,000
- Type 1 -"oCSP"
 - On the scar
- Type 2 "CSeP"
 - In the scar



THANK
YOU!