## Obstetrics and Infertility

#### Obstetrics – Initial History

- Vaccinations
- 1st day of last menstrual cycle (LMP)
- Previous pregnancies
  - Past abortions or miscarriages
  - Problems during pregnancy (DM, HTN, etc.)
  - Full term vs. premature
- PMH/PSH/Meds/Allergies/FH/SH
  - Also of Father
- Folic Acid

#### Calculating Estimated Due Date (EDD)

- Determine 1<sup>st</sup> day of last menstrual period (LMP)
- Add 1 year and 7 days
- Subtract 3 months

- What is the EDD of a pregnant woman with a LMP of August 7, 2017?
  - Add 1 year and 7 days to LMP = August 14, 2018
  - Then subtract 3 months = May 14, 2018 = EDD

#### Gravida / Parity

- Gravida: number of pregnancies (including current pregnancy if applicable)
- Parity: Number of completed pregnancies
  - Written as x + y
  - X = number of live births and number of stillbirths together
  - Y = number miscarriages
- Miscarriage: pregnancy loss before 24 weeks
- Stillbirth: pregnancy loss after 24 weeks

#### Gravida / Parity Examples

- Female with 6 previous pregnancies/ 5 live births and 1 miscarriage
  - G6 P 5+1

- Pregnant female with 5 prior pregnancies. 1 stillbirth and 4 live births.
  - G6 (5 previous and 1 current)
  - P5+0 (4 live births and 1 stillbirth + no miscarriages)
- Pregnant female with 4 prior pregnancies. 1 stillbirth, 1 miscarriage, 1 live single birth, 1 live birth of twins
  - G5 (4 previous and 1 current) P3+1 (2 live births and 1 stillbirth+1 miscarriage)

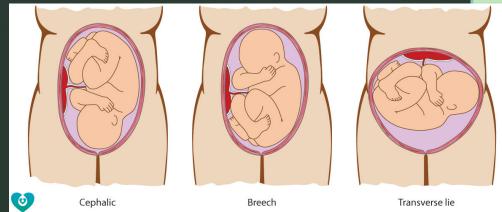
#### Obstetrics – Ongoing History

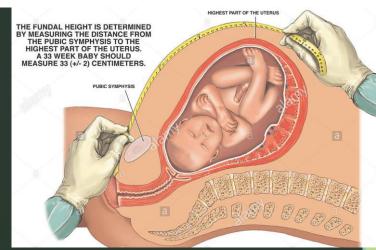
- Bleeding
  - Normal vs. placenta previae vs. placenta abruption vs. miscarriage
- Baby movement
  - Begins around 16-20 weeks
- Contractions
  - Braxton-Hicks contractions
- Discharge
  - Premature rupture of membranes (clear)
  - Candidiasis (white, itchy)
  - Bacterial vaginosis (green/yellow, bad smell)

# Types of Placenta Previa NORMAL LOW IMPLANTATION PARTIAL PLACENTA PREVIA TOTAL PLACENTA PREVIA

#### Obstetrics - Examination

- Blood pressure
- Fetal Heart Tones (after 12 weeks)
  - 110-160 beats per minute
- Edema
- Skin (scars, rashes)
- Fetal position
  - Cephalic (vertex), breech, transverse, oblique
- Fundal height
- Vaginal exam if indicated (discharge, bleeding, assess fetal position)





#### **Obstetrics - Labs**

Initial: CBC, blood type, Hepatitis B+C, rubella immunity

- Urinalysis at every visit
  - Nitrates: infection
  - Glucose: possible diabetes
  - Protein: possible pre-eclampsia (toxemia of pregnancy)

Fasting blood sugar at 28 weeks

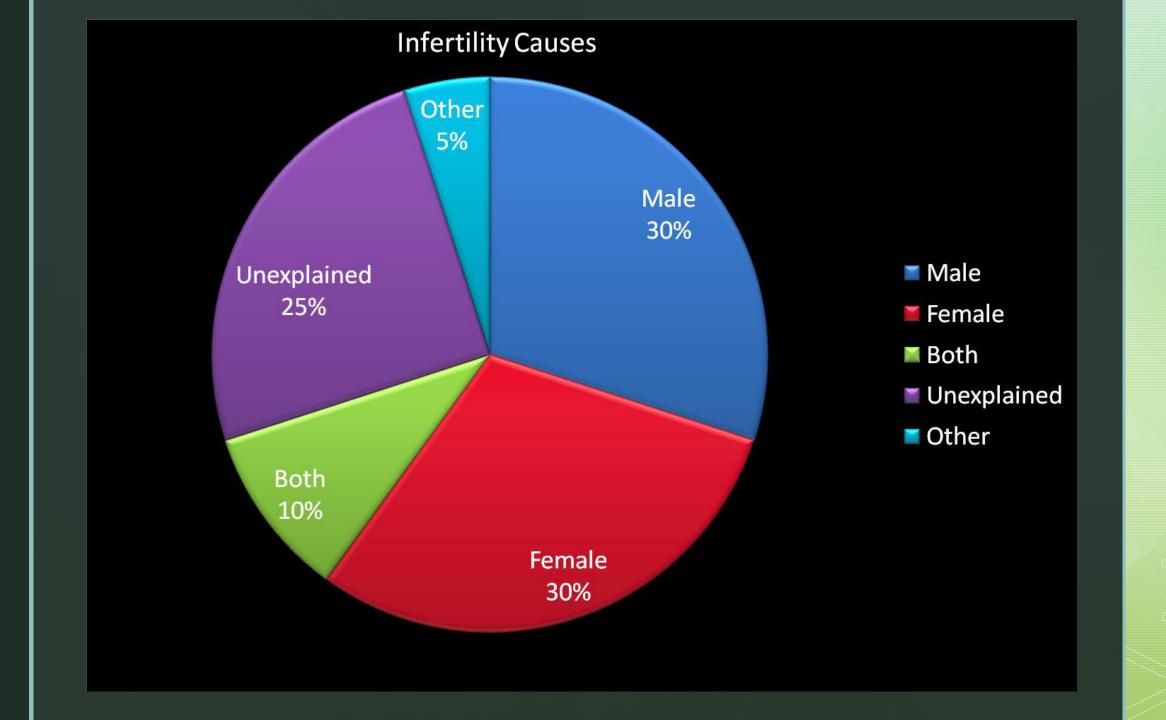
#### Obstetrics -Summary

#### History:

- 1st appointment: Normal history + Vaccinations + 1st day of last menstrual cycle (LMP) + History of Previous pregnancies
  - Make sure they are taking folic acid!!!
- Ongoing appointments: Bleeding, contractions, discharge
- Physical exam: Blood pressure + fetal heart tones +edema + fundal height

#### BRIEF CAPPP

 Bleeding and discharge, Rashes, Immunizations, Edema, Fetal movement and position and height, folic Acid, blood Pressure of mom, Pulse of baby,
 Pain - contractions)



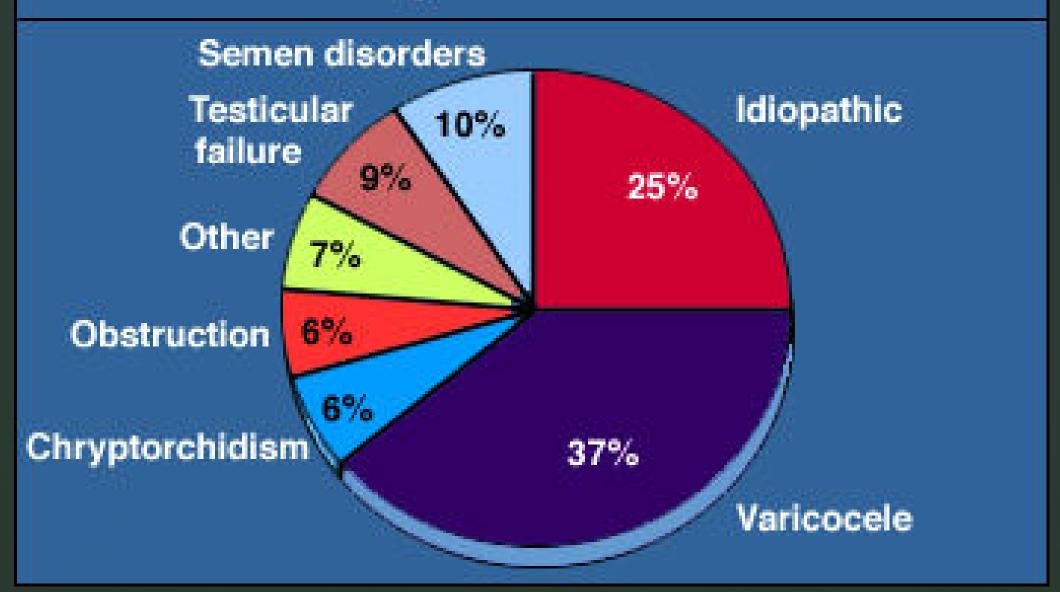
#### Infertility - Definitions

Infertility: Failure to conceive after 1 year of unprotected sexual intercourse

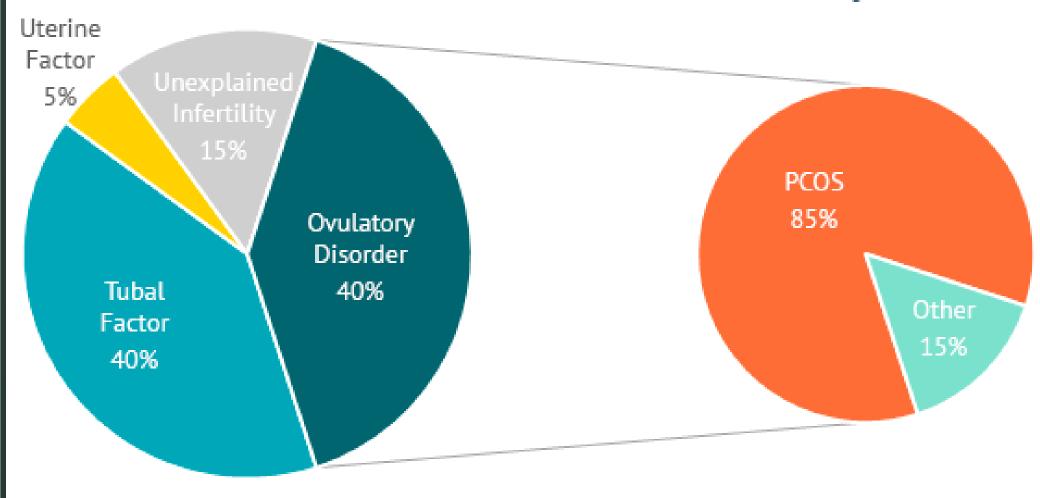
Primary infertility: couple has failed to conceive before

 Secondary infertility: woman has previously been pregnant and is now unable to conceive

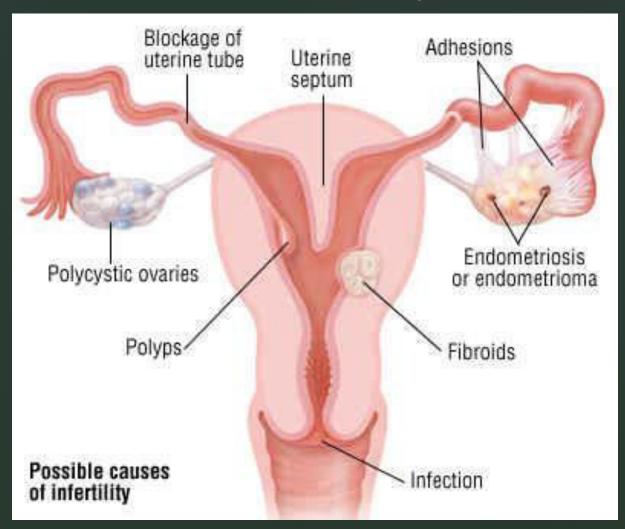
#### Male Infertility Disorder



#### Causes of Female Infertility



#### Female Infertility - Causes



#### Infertility – Female History

- Sexual History: frequency of intercourse, problems during intercourse
- Contraceptive use history
- Menstrual history:
  - Age of menarche
  - Regularity of cycle
  - Amount of bleeding
  - Duration of menstrual cycle
  - Pain with menstruation
- PMH/PSH/Meds/Allergies/FH/SH
- Specific symptoms
  - STDs, galactorrhea, thyroid symptoms, hirsutism, acne

#### Infertility – Male History

- Sexual History: frequency of intercourse, problems during intercourse
- Contraceptive use history
- GU History:
  - Lesions/swelling/pain in testicles/scrotum/penis
  - Undescended testicles
- PMH/PSH/Meds/Allergies/FH/SH

#### Female Infertility - Investigations

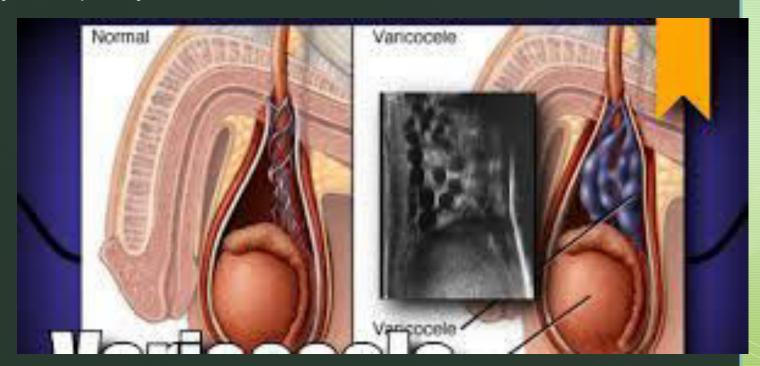
- Labs:
- Thyroid function tests (TSH, T3, Free T4)
- Prolactin
- Follicle stimulating hormone (FSH)
- Luteinizing hormone (LH)
- Imaging:
- Hysterosalpingogram
  - Investigates tubes and uterus
- Ultrasound
  - Evaluates ovulation by examining uterine wall



#### Male infertility - Investigations

- Labs:
- Semen analysis quantity and quality

- Imaging:
- Scrotal ultrasound
  - Detects varicocele

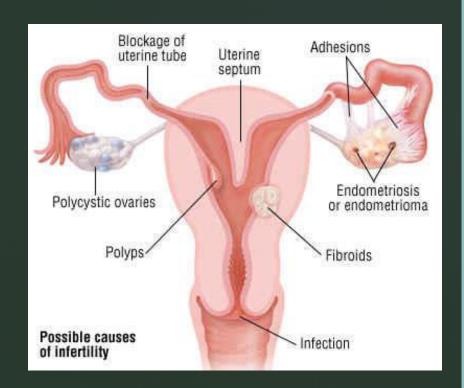


#### Infertility - Treatment

- Reassurance or advice if definition of fertility not met
- Treat underlying problem
  - hypo/hyperthyroid, prolactinoma, infection, etc.
- Varicocele (surgery)
- Blockage of tube or uterus (surgery)
- Ovulation problem
  - Lose weight
  - Fertility drugs (clomiphene, metformin)

#### Infertility - Summary

- Caused my male and female equally
- Need to assure criteria for infertility is met
- Main cause is male is varicocele
  - Diagnosed by ultrasound and needs surgery
- Main causes in female are hormonal problems or blockage
  - Diagnosed by labs or imaging



### Thank you!