

STEP 1 REVIEW

REPRODUCTIVE

High-Yield Clinical Presentations



MED STUDENT SUCCESS

- Amniotic band
constriction in limb tissue
of fetus

- Baby born with clubfeet

- Oligohydramnios leading
to lung hypoplasia and
facial/limb deformities

Disruption

Deformation

Sequence

- Medication taken by mother that causes renal failure in baby

ACE-I

- Medication that causes vaginal clear cell carcinoma

DES

- Antibiotic that causes cartilage damage

Fluoroquinolones

- Medication taken by mother that causes discoloured teeth

Tetracyclines

- Medication that causes tricuspid valve abnormalities

Lithium

- Medication that causes limb defects

Thalidomide

- Baby born with thin vermillion border, smooth philtrum, small palpebral fissures

- Big baby born with caudal regression, hypoglycemia at birth, NTD

- Newborn with high pitched cry, sneezing diarrhea and tachypnea

Fetal Alcohol Syndrome

Diabetes

Neonatal abstinence syndrome

- Inability to swallow amniotic fluid due to esophageal atresia or anencephaly

- Inability to excrete urine due to renal agenesis

- 1 twin is small with hypovolemia and the other twin is bigger with hypervolemia

Polyhydramnios

Oligohydramnios

Twin-twin transfusion syndrome

- Yellow colored discharge from umbilicus

- Failure of vitelline omphalomesenteric duct to obliterate
- Abdominal pain, blood in stool

- Lateral neck mass anterior to sternocleidomastoid muscle

Patent urachus

Meckel diverticulum

Pharyngeal cleft cyst

- Sequence that leads to small jaw, cleft palate and airway obstruction

Pierre Robin sequence

- 1st and 2nd pharyngeal arch defects
- Facial and hearing defects

Treacher Collins syndrome

- 3rd and 4th pharyngeal pouch defects
- Cleft lip and cardiac issues
- Lack of thymus, low Ca

DiGeorge syndrome

- Failure of paramesonephric ducts to fuse leading to double uterus

Uterine didelphys

- Abnormal opening of urethra on ventral surface of penis
- Associated with inguinal hernia and cryptorchidism

Hypospadias

- Abnormal opening of urethra on dorsal surface of penis

Epispadias

- Sudden pelvic pain, nausea, vomiting
- Twisting around infundibulopelvic and ovarian ligament

- Obese female with multiple childbirths has protruding anterior vaginal bulge

- Flank bruising, pain and hematuria after MVA
- Rib 12 injury

Ovarian torsion

Cystocele

Renal injury

- Suprapubic pain, hematuria and difficulty urinating after MVA
- Intraperitoneal urine collection

Superior bladder injury

- Suprapubic pain, hematuria and difficulty urinating after pelvic fracture
- Extraperitoneal urine collection

Anterior bladder injury

- Male with blood at urethral meatus and difficulty urinating after falling on top of a fence or bike (straddle injury)
- Injury of spongy/bulbar urethra

Anterior urethral injury

- Male with blood at urethral meatus and difficulty urinating after pelvic fracture
- Injury of bulbomembranous urethra

Posterior urethral injury

- Infertility due to ciliary dyskinesia

Kartagener syndrome

- Infertility due to absence of vas deferens

Cystic fibrosis

- Abdominal/pelvic pain mid way through menstrual cycle

Mittelschmerz

- Pregnant female gets respiratory alkalosis, increased GFR and cardiac output and skin hyperpigmentation

Normal Pregnancy

- 52 year old female with hot flashes, insomnia and weight gain
- Labs: low E, high FSH

Menopause

- Tall male with small firm testes, gynecomastia
- Abnormal sertoli and leydig cell, high LH and FSH

- Short female with widely spaced nipples
- Fibrotic ovaries
- COA, BAV, fused kidneys

- Lack of puberty and can't smell
- Low GnRH, LH and FSH

**Klinefelter syndrome
(XXY)**

Turner syndrome (XO)

Kallmann syndrome

- Pregnant female grows coarse facial hair and newborn baby girl with ambiguous genitalia

- Female pt without menses
- Lack of pubic and axillary hair, blind ended vagina
- Male T and DHT levels

- Female pt gets deep voice and penis growth at puberty
- High T, low DHT

Placental aromatase deficiency

Androgen insensitivity syndrome

5a reductase deficiency

- Painful, tender uterus
- Bleeding
- MVA, smoker, cocaine

Abruptio placenta

- Painless, nontender
- Bleeding

Placenta accreta

- Painless, nontender
- Bleeding
- Low lying placenta on prenatal ultrasound

Placenta previa

- Painless bleeding before childbirth
- Fetal bradycardia
- Velamentous cord insertion

Vasa previa

- Heavy bleeding after childbirth

**Postpartum
hemorrhage**

- Sudden pelvic pain and bleeding
- No fetus in uterus

Ectopic pregnancy

- Vaginal bleeding, emesis, uterus large for dates, elevated hCG
- 46 XX, cluster of grapes/snowstorm appearance

Complete mole

- Vaginal bleeding, emesis, uterus large for dates, elevated hCG
- 69 XXY/XXX
- P57, maternal, fetal parts

Partial mole

- SOB and hemoptysis after pregnancy
- Very high hCG

Choriocarcinoma

- Elevated BP >20 weeks
No hx of HTN, no end organ,
no proteinuria
- Tx: hydralazine, labetalol,
nifedipine, methylopa

Gestational hypertension

- New HTN with proteinuria or
end organ damage >20 weeks
- Endothelial dysfunction and
vasoconstriction
- Tx: BP meds, IV mag to
prevent seizure, delivery

Preeclampsia

- Elevated BP + seizure
Tx: IV mag, BP meds,
immediate delivery

Eclampsia

- Hemolysis, Elevated Liver Enzymes, Low Platelets
- Schistocytes
- Tx: immediate delivery

HELLP syndrome

- Pregnant pt gets hypotensive when lying down
- Due to compression of aorta/IVC by uterus

Supine hypotensive syndrome

- Bump/swelling on labia majora

Bartholin cyst/abscess

- Postmenopausal female with white plaque/erosion on vulva

Lichen sclerosus

- Rough plaque on vulva
- Younger pt with HPV 16/18 or elder pt with lichen sclerosis

Vulvar/cervical carcinoma

- Red, crusted lesion on vulvar area

Paget disease

- Young female with cyclic pain each month lasting for a few days
- Vaginal bulge on exam

Imperforate hymen

- Vaginal tumor in pt with DES exposure or vaginal adenosis

Clear cell carcinoma

- Little girl with grape like mass protruding from vagina

Sarcoma botryoides

- Menopause <40 years old
- Karyotype screen

- Female athlete stops getting menses
- Bone weakness, fractures

- Menstrual irregularities in female with elevated BMI, acne, hirsutism
- Enlarged ovaries, cysts on ultrasound

**Primary ovarian
insufficiency**

**Functional hypothalamic
amenorrhea**

PCOS

- Painful menses
- Tx with NSAIDs

- Bloating, pelvic fullness
- Most common malignant ovarian cancer
- Psammoma bodies

- Young female with mass that reveals teeth/hair
- Can lead to torsion

Primary dysmenorrhea

Serous ovarian cancer

Teratoma

- Adolescent with ovarian tumor that has fried egg appearance
- Elevated hCG and LDH

Dysgerminoma

- Schiller duval bodies
- Elevated AFP

Yolk sac tumor

- Spindle shaped cells
- Meig syndrome with ovarian mass, ascites and pleural effusion

Fibroma

- Ovarian mass that produces androgens
- Female presents with hirsutism, male pattern baldness or clitoromegaly

- Call exner bodies
- Elevated estrogen and inhibin

- Uniformly enlarged uterus
- Uterine glands in the myometrium

Sertoli-leydig cell tumor

Granulosa cell tumor

Adenomyosis

- Adhesions in the endometrium
- History of uterine procedure like D&C
- Can lead to decreased fertility and pregnancy loss

Asherman syndrome

- Elevated estrogen leading to endometrial proliferation
- Postmenopausal bleeding

Endometrial hyperplasia/carcinoma

- Endometrial tissue in ovary
- Pain with menses and defecation

Endometriosis

- Fever, leukocytosis, vaginal discharge after childbirth
- Staph aureus/E. Coli
- Tx with gentamicin, clindamycin

Endometritis

- Irregularly enlarged uterus, heavy menses
- Smooth muscle proliferation

Fibroid (leiomyoma)

- Malignant smooth muscle proliferation in postmenopausal female

Leiomyosarcoma

- Young female with breast pain and lumps at the time of menses

Fibrocystic change

- Painless breast lump after recent injury

Fat necrosis

- Breast pain while breastfeeding
- Staph aureus
- Continue breastfeeding, antibiotics

Lactational mastitis

- Young female with small mobile breast lump
- Well circumscribed

Fibroadenoma

- Bloody nipple discharge

Intraductal papilloma

- Large breast mass
- Leaf like projections on histology

Phyllodes tumor

- Male with breast enlargement
- Hx of Klinefelter, testicular tumor, spironolactone, cirrhosis

Gynecomastia

- Palpable hard breast mass in upper outer quadrant
- Postmenopausal female
- Nipple retraction/skin dimpling = suspensory ligament

Breast cancer

- Most common breast cancer
- Glandular duct cells

Ductal carcinoma

- Decreased e-cadherin
- Line of cells

Lobular carcinoma

- Red, crusted breast lesion

Paget disease

- Breast redness, warmth and swelling
- Peau d'orange = lymphatic involvement

Inflammatory cancer

- Abnormal penis curvature
- Fibrous plaque in tunica albuginea

Peyronie disease

- Prolonged persistent erection
- Depressed patient on trazadone

Priapism

- Testes fail to descent, palpable mass in abdomen
- Fertility issues, increased risk of germ cell tumors

Cryptorchidism

- Sudden, severe testicular pain in young boy
- High riding testis, absent cremasteric reflex, no relief with elevation

Testicular torsion

- Dilated veins in pampiniform plexus
- Bag of worm appearance, increases with valsalva, no transillumination
- More common on left side

Varicocele

- Scrotal swelling that transilluminated
- Due to incomplete obliteration of processus vaginalis

Hydrocele

- Painless lump in testicle that does not transilluminate
- PI ALP elevated, fried egg appearance

Seminoma

- Painful, hemorrhagic, necrotic testicular mass
- Elevated hCG

Embryonal carcinoma

- Elevated AFP
- Syncytiotrophoblasts and cytotrophoblasts affected

Choriocarcinoma

- Reinke crystals
- Produces androgens/estrogens

Leydig cell tumor

- Pain in posterior testis
- Pain relief with scrotal elevation (positive prehn sign)

Epididymitis

- Tender, boggy prostate
- Elder males = E. coli
- Younger males =
Chlamydia/Gonorrhea

Prostatitis

- Elder male with urinary frequency, peeing at night
- Smooth enlarged prostate on DRE

BPH

- Elder male with urinary issues and low back pain
- Irregular, nodular prostate

Prostate cancer

THANK YOU!

Questions?

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More STEP Resources: medstudentsuccess.com



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