Condition of Penis C=congenital A=acquired	**Definition / Manifestations**	**Treatments / NI's**
Epispadias C	Urethra located on dorsal (top) side of penis	surgery to correct urethra to normal position done in early childhood
Hypospadias C	Urethra located on ventral (bottom) side of penis	usually don't treat unless chordee, problems w/ normal urination or intercourse-surgical intervention; surgery for cosmetic or emotional well being
Phimosis A	constriction of penile foreskin preventing retraction; from edema, inflammation, poor hygiene, chronic irritation, smegma collection	Circumcision Conservative: manual retraction, ice, topical corticosteroid cream
Paraphimosis A	edema of retracted uncircumcised foreskin preventing normal return of foreskin over glans	Treatment-antibiotics, warm soaks, and ultimately a circumcision or dorsal slit of prepuce. Prevent: careful cleaning and replacement of foreskin.
Posthitis A	inflammation of foreskin	Cleaning, what's the cause?, and possible circumcision
Balanitis A	inflammation of glans penis	Cleaning, what's the cause?, and possible circumcision
Urethritis A	inflammation of urethra	Cleaning, what's the cause?, and possible circumcision
Penis Ulcerations A	Many causes: sti's , benign lesions, catheters …	No self treatment
Priapism A	Long-maintained erection, lasting longer than 6 hours, without sexual desire- painful; may be a urologic emergency due to compromised circulation to penis and inability to void Ischemic vs. nonischemic	-conservative tx- prostatic massage, sedation, smooth muscle relaxant injected directly into corpora cavernosa -tx- aspiration and irrigation of corpora cavernosa or surgery (shunts); again be sensitive emotional support

Condition of Scrotum	Definition / Dx / Manifestations	Treatment / NI's
Skin conditions	include fungus, dermatitis, scabies, lice; rugae inhibits ventilation	Good hygiene & prompt interventions
Epididymitis	-infection of epididymis (long coiled cord, transports sperm to ductus deferens) -Most common of all intrascrotal infections -STI- GC or chlamydia; or infection- prostate, urine, etc - swelling (severe), tenderness, pain, scrotum hot to touch, increased temp, "duck waddle", it is rarely bilateral	-Antibiotics- both partners if sexual contact, bedrest (upright causes strain), elevate & support scrotum, Intermittent ice. Can get oob with Scrotal support. Prn pain meds. Removal of epididymis in older men with chronic infection. -complication: abscess -teaching: tenderness to decrease in 1 week, swelling may last weeks or months; no heavy lifting, no sex until infection controlled, increase fluid, possible sterility; usually in conjunction with orchitis
Orchitis	-inflammation of the testicle, painful, tender and swollen. -Occurs after episode of bacterial or viral infection ie: mumps, pneumonia, tb, or syphilis. -Or as a side effect of epididymitis, prostatectomy, trauma, infectious mono, influenza, catheterization or complicated uti. -Mumps orchitis get 4-7 days after mumps.	Treatment: antibiotics, pain meds, bedrest with scrotal support and ice pack
Hydrocele	-painless collection of clear fluid anywhere along the spermatic cord -transillumination! -secondary to abnormality in lymph drainage s/sx: vary with size and mass – painless until fluid accumulates!	-tx: surgical drainage (if large amount), scrotal support -surgery avoided in men seeking family planning -teach: can be secondary to epi or orch
Varicocele	-dilatation of veins draining the testes - ages 15-25 - Often become asymptomatic or disappear after sexual intercourse -s/sx dragging, pulling sensation; dull pain; 'bag of worms'	-Treatment –surgery if severe or for fertility reasons (embolize the dilated veins)
Spermatocele	- firm sperm containing cyst of epididymis - visible with transillumination -unknown cause	Surgical removal
Testicular torsion	- twisting of the spermatic cord that supplies blood to the testes and epididymis on a pedicle resulting in **venous thrombosis & occlusion** **-**young males < 20 - s/sx**: pain** is intrascrotal and radiating to corresponding groin area, tenderness, nausea, vomiting, scrotal edema, tender, irregular edematous mass in scrotum. **One testicle may be twisted & drawn up higher**. Pain is not relieved by support & elevation	- assess blood flow -decrease or absence confirms dx - may resolve on own, if not- ER – surgical correction to untwist and restore blood flow

Tumor of the Testes	- Most frequent occurring cancers in males 15-35 yrs -either testicle affected -slow or rapid in growth -s/sx: -Often asymptomatic; Painless enlargement of testicle lump or thickening in scrotal sac-no pain on squeezing, "heaviness" in lower abd., perianal area or scrotum from hemorrhage in tumor, sometimes c/o dull ache in these areas; Hydrocele may develop; Firm mass-testes may be irregular or oval in shape; Not transilluminated; (Back pain, cough, dyspnea, gynecomastia, may experience these if metastasis has occurred) -Dx: transilluminate (will not show); US; NO BIOPSY	-tx depends on stage and type -surgical removal -Radiation & chemo (very susceptible) -discuss fertility options prior -teach about TSE- monthly; warm area
Erectile Dysfunction	- inability to attain or maintain an erect penis that allows for satisfactory sexual performance -not common under 30 yrs unless drug/etoh abuse -primary: never experienced adequate erection -secondary: has lost the ability or can only perform in specific situations -classes: ---organic: gradual deterioration of function, ↓ firmness and ↓ in frequency of erections -Inflammation -OR related -Pelvic fxs -Lower spinal injuries -Htn, dm, thyroid disorders -Chronic neuro conditions -Smoking, etoh -Certain medications: AntiHTN's, antidepressants -Poor overall health ---functional: psychological cause; normal nocturnal and am erections; usually sudden onset and after period of high stress -Dx: complete history, palpate peripheral pulses, sensation of genitalia, check hormone levels, thyroid, r/o DM; vascular; tumescence and rigidity testing	1: Medications: **PDE5 inhibitor** Po meds include sildenafil-Viagra, tadalafil- Cialis and nuviva- smooth muscle relaxation and increase arterial blood flow with corporal venocclusion = erection; take ONE hour prior to activity, ONCE a day, contraindication with nitrates Vacuum: Pulls blood into the corporeal bodies; constrictive ring placed around base to retain erection 2: Penile Injections: Self-injection to increase blood flow; not good for men with poor dexterity Penile pellets: transurethral suppository, absorbed and erection within 10 minutes and lasts 30-60 minutes 3: Implant: Semi-rigid: plastic rods inserted; semi-perm rigid Inflatable: reservoir in abd and pump in scrotum

Condition	Definition / Manifestations	Dx	Tx / NI's
PMS	-Symptoms that appear 7-10 days prior to onset and disappear during -vary in severity and degree -breast tenderness, swelling, fatigue, irritability, HA, bloating, mood swings, cravings -s/sx intensify with age! -risk factors: age, ↑ amount of kids, stress, diet, marriage, toxemia -causes: cyclic fluctuations of progesterone and estrogen, vit B6 def, diet, prolactin and aldosterone imbalance	-symptom diary x 3 consecutive cycles -based on timing***	-good nutrition: ↓ sodium, etoh, sugar, and caffeine -exercises -stress management -vit b6 supp or green leafy veg -progesterone: R or V (dec use) -diuretics -BCP -ibuprofen * -SSRI's
Dysmenorrhea	-Primary: no patho; peak age 20 and then decrease -Secondary: associated with another disease; after adolescence, ages 30-40; discomfort begins with flow and lasts 12-72 hours -s/sx: sharp colicky pain, 12-24hours before menses and lasts 24-48 hours with discomfort on 1st day, N/V/D, HA, pain to back and inner thighs -most common ages 15-25 yrs, most fade after peak age -causes: prostaglandin release during luteal phase = uterine contractions = ischemia = pain	- pattern of s/sx - differentiate between primary and secondary	-depends on severity -heat, rest, mild analgesics -prostaglandin inhibitors: ibuprofen* best to take q4-8 hours to maintain drug level -BCP -prevention: exercises!, good nutrition, avoid constipation, avoid stress

Menstrual Irregularities	Definition	Causes
Amenorrhea	No menses; primary (no menses before 16 yrs) vs. secondary (cessation of menses after established)	Natural- pregnancy; Lifestyle- excessive exercise, low body weight, stress; Hormones- imbalance 2° pituitary tumor
Menorrhagia: Heavy	Excessive bleeding (> 80 mL) and increased duration	Refer to DUB
Oligomenorrhea	Long intervals (> 35 days) between menses	Anovulation
Metrorrhagia (intramenstrual bleeding)	Bleeding/spotting between periods	Refer to DUB

Dysfunctional Uterine Bleeding: abnormal bleeding in duration or amount or regularity	-hormonal so treated with estrogen and progesterone -no organic cause -single episode = spontaneous abortion -postmenopausal = ? endometrial ca -other: IUD, fibroids, endometriosis, CA, some meds (anticoags), eating disorders	-weigh pads, compare to normal; history – bleeding patterns etc…	-tx: age and cause -conservative: hormonal tx- progesterone and estrogen to adjust cycle (BCP) -surgery: ablation, d/c, hyster -breakthrough bleeding and on BCP- may need to switch type

Menopause physiologic cessation of menses; decreased ovary function; occurs during climacteric for all females	Climacteric: go from reproductive to non-reproductive
Perimenopause Period from when: first signs of menopause to complete cessation of menses	**Postmenopause** 1 year post last period

Etiology: *physical changes, and psychological/social implications*

- Ages: 40-58 yrs; ave. 52
- Pattern of cessation: over 1-2 yrs
- Flow: occurs less frequently and becomes irregular and less in amount
- No periods x 1 yr = menopause has occurred
- May be abrupt cessation

s/sx: (most explained by ↓ estrogen)
- dyspareunia, dryness, itching, burning

-irregular bleeding, more infections

-wt gain, insomnia, joint pain, irritability, depression, forgetfulness, difficulty concentrating

-HOT FLASHES

-OP

Factors for Early menopause:	Causes:	Diagnosis:
• Radiation- excessive • Hard manual labor • General Health: poor; hypothyroidism; obesity • Maternal Health: inadequate space between kids; frequent elective abortions • Smoking • Surgical/Artificial: ovary radiation, removal of ovaries, or hysterectomy	Not known for certain; Decrease in # of maturing ovarian follicles/decline in estrogen→ ovaries atrophy→ estrogen decreases→ increased FSH & LH	↓ estrogen ↑ FSH & LH symptoms

Treatments for Menopause

Hormone Therapy	Nutrition	Hot Flashes	Non-Hormonal Therapy

• Estrogen/Premarin po (0.625 mg)
  o short-term*
  o days 1-25 of cycle
• Progesterone/Provera po (10 mg)
  o Days 16-25 for females with uterus (↓ r/f CA)
  o Or 2.5 mg continuously
• Combo: prempro
• Transdermal: estradiol patch
  o Changed 2x a week
• Estrogen suppositories or creams
  o Symptomatic (dryness, itching, pain)
• Follow-up every 3-6 months needed
• Usually only given for 6-12 months to help with adjustment
• Helps with s/sx of vasomotor and reverses symptoms of vaginal atrophy and prevents OP
• Contraindicated: family h/o uterine or breast ca, undiagnosed vaginal bleeding, h/o dvt/pe
• s/fx: breast swelling & pain, edema, wt gain, atypical uterine bleeding
	• po fluids
	• complex CHO & vitamin b6
	• yogurt
	• vitamins
	  o vit D & calcium
	  o ca – 1500 mg/day
		• cool clothing
		• loose layers
		• limit red wine, chocolate, & aged cheeses – tyramine
		• avoid ETOH, caffeine, & smoking
		• phytoestrogen's (soy) interact with estrogen receptos
		• black cohosh with ginseng – help with hotflashes & dryness
			• SSRI's
			  o Paroxetine/paxil; Fluoxetine & venlafaxine/Effexor
			  o Help reduce hot flashes
			• Clonidine/Catapres & Gabapentin/Neurotin help with vasomotor symptoms
			• SERM's
			  o Raloxifene/evista
			  o Benefits of estrogen (prevent bone loss) without negative effects (endometrial CA)

TSS

Toxin secreted by staph, enters bloodstream via injured tissue (microabrasions) -fluid leaks out -decreases blood return to heart -leads to tissue hypoxia, renal & CNS abnormalities -damage organs, interferes with clotting cascade -SHOCK	Signs/symptoms: -fever 102 -RASH- red macular palmar or diffuse; peeling of skin on hands and feed 1-2 weeks after illness onset -HA, flu-like s/sx -weakness -N/V/D -hypotension, fainting
Risk factors: (female) -menstruation -super tampons, diaphragms -inserted with dirty hands -chronic vaginal infections -herpes -not using tampons regulated by manufacturer	Dx: -r/o rocky mountain spotted fever & measles - 3 or more organ systems involved -culture ? staph
Treatment: -symptomatic -fluids -antibiotics	Prevention: -tampon use, pads at night -only use appropriate size, avoid super -change regularly, q3-4 hours, no longer than 8 -wash hands! -after having tss, no tampons until cx's neg

PID

• Inflammation of pelvic cavity, may involve repro organs • ASCENDING • Causes: -untreated cervicitis -organisms entering during intercourse or following surgery, abortion, childbirth -IUD's • GC & staph spread along lining to tubes = pelvic peritonitis or tubo-ovarian abscess • Strep crosses through lining to tubes and ovaries = pelvic cellulitis & clots	• Acute o General malaise, fever, chills, anorexia, N/V, tachy, lower abd pain, aggravated by defecation o discharge- heavy purulent=GC, thin mucousy = strep o ↑ WBC & ESR • Chronic o When acute not responding to tx or inadequate o Persistent pelvic pain, dysmenorrhea o Chronic backache, constipation, malaise, low grade fever, DUB, and acute s/sx o Results = chronic pain!

Complications: Sterility, infertility, ectopic pregnancy (all from scarred tissue), peritonitis, septic shock, emboli, abscesses	Dx: H&P PE- abd tenderness, increase pain with pelvic exam, enlarged tubes/ovaries r/o appendicitis, ectopic pregnancy vaginal US ↑WBC, ESR Culture drainage
Treatment: -abx & treat partner! -rest -semi-fowlers promotes drainage -sitz bath -analgesics -possible steroids -fluids -heat -surgery – drain abscess -hyster - extreme	NI's • educate: -avoid sexual activity x 3 weeks, no douches -abx: complete entire dose, do not take with ETOH or antacids -F/U within 48-72 hours -may need hospitalization if ↑ pain and abscess -early s/sx -treat partner & f/u -prevention of STI's -preventing spread to others

Uterine Prolapse

1st: cervix = lower part of vagina	s/sx: dragging, pulling, incontinence, backache, dyspareunia, visible protrusion, discharge/bleeding
2nd: cervix = at vaginal opening	Tx: Depends on degree Pessary's: teach cleaning & follow-up, how long to wear (too long = erosions, fistulas, r/f CA) Kegel's
3rd: uterus through vaginal opening = ulcers! Irritation = procidentia Often with cystocele, rectocele, &/or enterocele	

Uterine Displacement

Normal: - freely movable -Lies between the bladder and rectum in the forward position-flexes forward 45 degrees -uterine body is inclined slightly forward	**Anteflexion / anteversion displacement:** -Marked forward bending of body of uterus -Small underdeveloped organ -No s/sx- may have urinary s/sx -Failure to conceive (due to size of uterus rather than position)
Causes of displacement: -Strain of normal function -Adhesions -Weakening of natural supports (perineal muscles) -Injuries during childbirth or surgery -Usually cause no severe problems but may give troublesome symptoms	**Posterior displacement:** backward tipping of the uterus, the uterus falls backward toward rectum, caused by tearing and stretching of supporting ligaments during pregnancy and delivery **3 types:** **Retroversion**- backward rotation of uterine body with forward rotation cervix (happens in degrees) **Retroflexion**- uterus body bends backward, cervix remains in normal position **Retrocession**-backward displacement of entire uterus without rotation or bending -Signs and symptoms: -c/o low back pain that is worse at start of menses - pelvic pain or a heavy feeling -Dysmenorrhea or menorrhagia -Fatigue -Bladder irritation - dyspareunia -Infertility -Treatment: -pelvic exercises to stretch and strengthen uterine ligaments and pelvic muscles -knee-chest position x five minutes 2-3 times a day-this helps bring the uterus forward -kegel exercises 5 counts of 10, 10 times a day -Pessary -Surgical repair-uterine suspension to shorten round ligaments

Cystocele results when the supports of the vaginal wall and bladder are weakened, this is a hernia of vaginal supports allowing the bladder to bulge into the upper vagina <u>Causes</u> -Childbirth -Decrease hormone levels with menopause <u>Signs and symptoms</u> - dragging pain or pressure, feeling of sitting on a ball -Bearing down sensation -Poor bladder empting - urge incontinence, stress incontinence, frequency & urgency <u>Treatment</u> -Early stages perineal exercises Kegels, vaginal pessary -Surgery if recurrent cystitis and protrusion: anterior Colporrhaphy- tightens the vaginal wall with **bladder repair** -Postoperatively- urinary catheter for 4 days allowing edema to subside and to keep the bladder empty and reduce strain on the sutures -Perineal care BID -Ice pack -Sitz baths, later	**Urethrocele** -urethra bulges into the vagina - during pregnancy due to connective tissue changes which normally occur-this usually clears up spontaneously after delivery and recurrence following menopause is to be expected -It is usually accompanied by stress incontinence and pt has c/o protrusion Treatment -Surgical- marshall marchetti- bladder suspension surgery
Rectocele the rectum bulges into the lower 1/3 of vagina, it may bulge thru vaginal opening <u>Causes:</u> Childbirth, decreased hormone levels with menopause <u>Signs and symptoms</u> -There may not be any s/s for slight or moderate rectocele -vaginal pressure, rectal fullness, incomplete fecal evacuation -For severe : fecal material enters the hernia and defecation can only be accomplished by reducing hernia, straining makes it worse Other signs and symptoms = constipation, incontinence, hemorrhoids <u>Treatment</u> -For early stages kegel exercises, vaginal pessary, & stool softeners -Surgery-posterior Colporrhaphy-this tightens the vaginal wall, **bowel repair** -bowel prep pre-op -Post-op- no straining- eating a low residue diet and giving a stool softener each night; perineal care, ice pack, sitz -a/p repair- anterior and posterior colporrhaphy -- cystocele and rectocele repaired	**Enterocele** hernial weakness between the uterosacral ligaments just posterior to the cervix- hernial sac often contains **small bowel** may be congenital or from birth trauma Often misinterpreted as a rectocele and after repair of rectocele the s/s still persist <u>Signs and symptoms</u> Discomfort vaginal pressure, gi obstruction, Look for it when repairing rectocele <u>Treatment</u> Vaginal pessary, weight reduction, surgery
For All ‘cele’ Repairs: Pre-op teaching- extent of surgery teaching; What to expect post-op (catheter, packing, bleeding, pain/pressure) Need to do a douche and bowel prep pre-op	Post-op: -Prevent pressure on suture line and prevent infection -Perineal care bid and after urination and bm -sitz baths, Ice pack, Catheters for cystocele and urethrocele repair -discharge teaching: douches or mild laxative PRN, Restriction of heavy lifting, prolonged standing, walking or sitting, Avoid intercourse until released by dr, Can have loss of vaginal sensation that can last several months, assure pt this is temporary

Leiomyoma (myoma, fibromyoma, fibroid, fibroma) Well circumscribed, non-encapsulated, benign! Single or multiple; tiny to gigantic! *do not grow after menopause (hormone dependent)	**Cervical Polyps** -benign, pedunculated -single or clusters -most common tumor of cervix -soft, bright red, fragile	**Ovarian Tumors** -fluid cysts or solid masses (frequently bilateral) -benign or malignant -small or large -simple cyst-thin capsule, during repro years -asympto until large enough to cause pressure
S/Sx: -asymptomatic -symmetric uterine enlargement confused with pregnancy -menorrhagia -infertility -urgency, frequency (pressure from tumor) -pelvic pressure = edema and varicosities -?pain -dysmenorrhea -distorted abd	S/sx: -asymptomatic except bleeding (esp. after intercourse)	S/Sx: -Constipation, urinary frequency, abdominal fullness, pelvic pain, increase abdominal girth, irregular menses Dx: Pelvic exam Laparoscopy Ultrasound
Dx: H&P: menorrhagia? PE: can palpate if uterus displaced or if tumors = large US, Hysteroscopy, MRI = benign vs. malignant		Tx: -remove one or both ovaries if large or solid; remove if torsion occurs PCOS
Tx: -none if no s/sx -if bleeding an issue near menopause, then BCP until menopause -myomectomy-preserves uterus -hysterectomy poss. Vag assist if large tumor -few s/sx: nsaids, BCP, GnRH agonists, TCRE (transcervical endometrial resection – ablation) for childbearing -uterine artery embolization- blocks circulation to tumor	Tx: -excision -polypectomy-send for patho	**Polycystic Ovarian Syndrome** -chronic benign cysts from ↑ LH and ↓ FSH (which causes too much estrogen and testosterone but not enough progesterone) -happens after 1-2 yrs of normal periods -irregular periods, amenorrhea, oligomenorrhea, DUB, infertility, hirsutism, obesity, acne -left untx = r/f CV disease, type II DM, ovarian & endometrial CA Tx: -BCP- control cycles -Glucophage (Metformin) for hyperandrogenism and ovulation + reduces hyperinsulinemia -Leuprolide/Lupron for hyperandrogenism -Clomid – fertility -Hyster with bilat salpinoophorectomy (all others unsuccessful) Teaching: low carb, high fiber, low salt diet; weight management* & f/u care

Endometriosis	S/Sx	Dx	Tx
- endometrial tissue is found outside the uterus, attached to other organs or tissues - tissue responds to cyclic changes and bleeds= symptoms - nulliparous women ages 25-40 with infertility in 30-60% of them -theory of regurgitation: endometrial tissue regurgitates through the fallopian tubes and deposits particles of endometrium outside the uterine cavity -genetic -altered immune function ?	-Often none until age 30-40 yrs , ¼ without s/s -s/s relate more to the location than that the degree of disease present -Pain- ranges from crampy to sharp pain -begins before menstrual periods- 2-3 days before periods, decrease after onset of flow- 2-3 days (this is secondary dysmenorrhea) -pain during intercourse- dyspareunia -menstrual irregularities, infertility -full feeling in lower abd, painful defecation, backache and dysuria are less common -s/sx may or may not correspond to the menstrual cycle and -menopause- estrogen no longer produced in ovaries so s/s can disappear -Collection of menstrual flow in cysts on the ovaries may be a source of pain esp if rupture therefore causing adhesions- this is known as chocolate cysts (dark and tarry)	-bimanual exam or laparoscopic visualization of lesions -bx- most definitive -Pelvic ultrasound -MRI	-mild = analgesics = ibuprofen, diuretics r/t PMS -Depends on age, and desire to have children and severity of s/s -Menopause- hormone decrease thus decreasing s/sx of endometriosis For severe s/sx: -The idea would be to get pregnant- during pregnancy no menses -Estrogen and progestin contraceptives, ovulation is suppressed- **pseudo-pregnancy** -Antigonadotropics- decrease ovarian function- danazol - creates **pseudo-menopause** -Danazol: synthetic androgen that inhibits anterior pituitary's output of fsh and lh- it suppresses the ovaries -ovulation restart after stopping, expensive, ? long term effects, birth defects-need BC while on; > 6 months -GnRH agonsists: = amenorrhea, pseudo-menopause; Lupron, > 6 months ***LOSS OF BONE DENSITY (menopausal state)** ***Not cured, controllable! Symptoms return & lesions return once off meds*** -Surgical: Conservative- lysis of adhesions up to age 35 Radical- remove uterus, tubes, ovaries and implants as much as possible, may leave ovaries
Teaching: -early pregnancy if possible -explain process, tx modalities, risk of recurrence -not curable, one stop taking meds, symptoms return -f/u care is important!!		**Adenomyosis:** a benign invasive growth of the endometrium into the muscular layer characterized by islands of endometrial glands scattered through the myometrium -not a tumor! Hyperplastic growth (internal endometriosis); 40-60 yr olds, multiparous women -s/sx: excessive, prolonged, persistent bleeding = anemia, uterus large & tender & firm -Surgery- total hyster, try to keep ovaries	

<table>
<tr>
<td rowspan="2">Hysterectomy
Removal of uterus
-Vaginal or abdominal
-total, partial, or radical

<u>Indications:</u>
Cancer of endometrium and ovary
Cervical dysplasia
Fibroids if increased bleeding or if tumor is large
Endometriosis
Chronic PID
Uterine prolapse, pelvic muscle relaxation
Sterilization if also have other problems
Uterine rupture</td>
<td>Vaginal
Removal of uterus with vaginal repair
-LAVH
lap assisted vaginal hyster (remove uterus vaginally); contraindicated for females with several abd sx’s (adhesions)</td>
<td>Total hysterectomy:

removal of uterus and cervix</td>
<td>Panhysterectomy or TAH_BSO (bilateral salpingo-oophorectomy):

removal of uterus, cervix, fallopian tubes, and ovaries</td>
</tr>
<tr>
<td>Abdominal
-large tumors
-tubes & ovaries removal
-↑ risk of complications</td>
<td>Radical hysterectomy:

panhysterectomy along with partial vaginectomy and dissection of lymph nodes in pelvis</td>
<td>Pelvic exenteration (total):

radical hysterectomy, total vaginectomy, removal of bladder with diversion of urinary system and resection of bowel with colostomy

- Anterior pelvic exenteration above operation without bowel resection

- Posterior pelvic exenteration above operation without bladder removal</td>
</tr>
<tr>
<td>PreOp:
-emotional needs
-include spouse/partner
-altered sexual response postop
-stop BCP 3-4 weeks prior
-no more menstruation
-if ovaries removed = menopause</td>
<td>PostOp Care:
-early ambulation
-Maintain fluid and electrolyte balance
-Thromboembolism and pulmonary embolism
-assess homan’s sign
-ted’s epc’s, questionable heparin
-Leg exercises
-Urinary retention common due to bladder manipulation during surgery, may have foley 1-2 days post op and pt may have temporary atony</td>
<td colspan="2">Complications:
-Paralytic ileus, thromboembolism, atelectasis
-Accidental ligation of ureter: s/s low back pain and decreased uo (methylene blue dye)
-Vaginal bleeding: check pads (may have vag packing)
-risk for hemorrhage – md to remove packing – vaginal or LAVH (no packing with abd)
-Check abdominal dressing if done abd</td>
</tr>
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<table>
<tr>
<td>Mammary Duct Ectasia
-Benign breast disease in peri and post menopausal female involving the ducts in the subareolar area
-Usually involve several bilateral ducts
-S/sx:
Nipple discharge that is multicolored and sticky, inflammation, initially painless but can progress to pain around nipple and areola swelling
-Not associated with malignancy
-Tx:
Warm compresses, antibiotics, may require surgical excision of ducts</td>
<td>Gynecomastia
- Overdevelopment of mammary glands in male
- during puberty and after 40 years old
- increased estrogen
-Usually nonmalignant
-biopsy in older male to rule out cancer</td>
<td>Fibrocystic Breast
-ages 35-50, or as young as 20
-hormone sensitive (disappear with menopause)
-round, palpable, lumps- well delineated, moveable, tender, multiple, bilateral
-become larger and more tender premenstrual!
-r/o CA with bx
-tx:
-wear sports bra, apply heat/cold, analgesics
-dietary- elim caffeine & theophylline, low salt
-vit E
-diuretics: reduce fluid(↓swelling)
-Danazol: ↓estrogen (↓pain)
-teach BSE</td>
<td>Fibroadenoma
-Common breast tumor usually in young women and adolescents (15-25 yrs)
-increase in A.A.’s
-? increased estrogen sensitivity In localized area of breast
-Non tender, round, firm, movable, usually unilateral
-Always benign and often stop at 2-3 cm; do not become malignant!!!
-Diagnosis and treatment: excision and biopsy</td>
</tr>
<tr>
<td rowspan="2">Paget’s Disease
Rare
Involves skin of nipple and areola
Men & women
After age 50</td>
<td>Breast Cancer
-1/8
-peak age 45-49, usually over age 60
-#1 cancer in women, 2nd leading cause of death</td>
<td rowspan="2">Risk Factors:
Female
Increasing age
Previous history of breast cancer
Family history of breast cancer (first degree) at a young age
Nulliparity
First live childbirth after age 30
Genetic mutations (BRCA I & II)
Obesity
High fat diet
Alcohol
Previous exposure to chest wall irradiation
Increased breast density
Estrogen use
History of cancer in other organs
Early menses & late menopause (<12; >55)</td>
<td>S/Sx:
Nontender lump –often in upper outer quadrant
Nipple discharge
Nipple retraction
Skin dimpling
Asymmetry of breasts
Peau d’orange skin
Nodular axillary masses
Ulcerations (late)</td>
</tr>
<tr>
<td>Dx:
BX!! (needle, incisional, excisional, stereotactic)
-mammogram – early detec
-MRI dense tissue
-genetic testing – extra
-sentinel lymph node bx

-mammo: 45-54 annual, >55 biennial (ACS)</td>
<td>ER/PR/HER 2 -/+
<u>Receptor-positive tumors</u>
•Well-differentiated
•Lower chance for recurrence
•Frequently hormone dependent and responsive to hormonal therapy
<u>Receptor-negative tumors</u>
•Poorly differentiated
•Often recur
•Unresponsive to hormonal therapy</td>
</tr>
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Lumpectomy -breast conservation surgery - wide excision of tumor, sentinel node dissection, &/or axillary node and radiation	**Wedge resection** -removal of tumor and 2-3cm wedge of normal tissue surrounding it and portion overlying skin	**total mastectomy or simple mastectomy** -removal of entire breast, most or all axillary lymph nodes leaving the chest wall muscles
modified radical mastectomy -tumors greater than 2.5 cm, removal of breast and axillary nodes but the major chest wall muscles remain -Most pts prefer this over lumpectomy when given a choice - choice of reconstruction -can be done right away following mastectomy or can wait until post op recovery about 6 months *This one and breast conservation surgery with radiation are the most common options for resect-able cancers and those diagnosed with early stage cancer* -Overall survival rate with the lumpectomy & radiation is same as this surgery	**Radical mastectomy** -removal of entire breast, skin, chest wall muscles and axillary lymph nodes	**Post op care** • Pressure dressing-chest wrapped in ace bandages to **help decrease bleeding and facilitates skin adherence to chest wall** • Drain - prevent collection of fluid in operative space • Incisional care -semi fowlers position with arm on affected side elevated on pillow 1.Early post op exercises within first week 2.Encourage flexing and extending fingers 3.hand and wrist; flex and extend elbow in first 24 hrs 4.Encourage self-care activities 5.No abduction of arm in early stage of recovery • Rationale for exercises (goal = full ROM in 4-6 wks) a. Prevent contractures b. Maintain muscle tone c. Improve circulation d. Increase mobility e. On the 10-12th day start pendulum swing
Lymphedema -edema of the arm on the operative side from node removal and decreased drainage -immediately after or anytime during life as a result of trauma or infection -Exercise and elevation = ↓ edema -No BP or venipuncture in affected side-can cause circulatory impairment or infection - elastic pressure gradient sleeve-it facilitates venous return and maintains maximum volume reduction -manual massage helps mobilize subcutaneous fluid accumulation	• Reconstruction can begin during the original breast removal procedure or after some healing has occurred (~ 6 months) • A tissue expander during the original procedure • Saline or silicone implants – permanent placement • Autologous flaps - for reconstruction • Nipple reconstruction tissue from the labia, abdomen, or inner thigh	**<u>DO NOTS</u>** -Carry your purse or anything heavy with affected arm -Wear a wristwatch or other jewelry on this arm -Cut or pick cuticles or hangnails on this hand -Work near thorny plants or dig in the garden -Reach into a hot oven -Hold cigarettes in this hand -Permit this arm to be used for injections, blood withdrawals, blood pressure **<u>DO</u>** -Wear a loose rubber glove on this hand when washing dishes -Wear a thimble when sewing and take care to avoid pinpricks -Apply a good lanolin hand cream (emollient) several times daily -Wear a life-guard medical aid tag -Contact your dr if your arm gets red, warm or unusually hard or swollen -Return for f/u and re-measurement for a new gradient elastic sleeve in two months