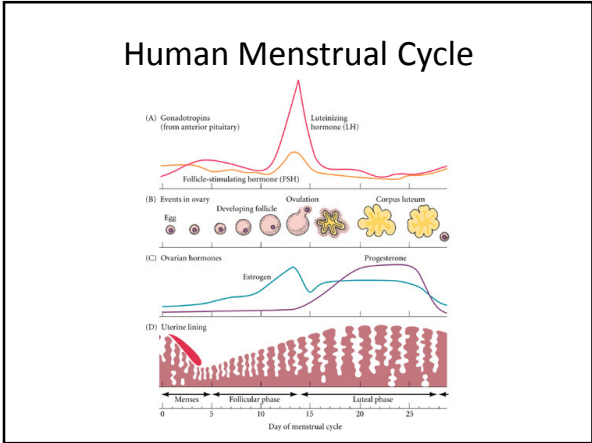


Pathology Session #4:
Gynecology
and
Urology/Nephrology

Gynecology



Premenstrual Syndrome (PMS)

- Etiology: hormone imbalance
- Excess estrogen

Signs/Symptoms 10-2 days before period:

- Anxiety/irritability
- Hyper-hydration (bloating)
- Food cravings
- Depression

Abnormal Growths

Cysts

= fluid-filled sacs

- Thin or thick-walled
- Contain pus, water, blood, or specialized tissues*

Examples:

- ovarian cysts (i.e. 'chocolate' cyst of endo)
- breast cysts (FBD)

- Fibroids

= muscular-type tissue

- hard, dense, white
- =benign tumour

Examples:

- Uterine fibroids

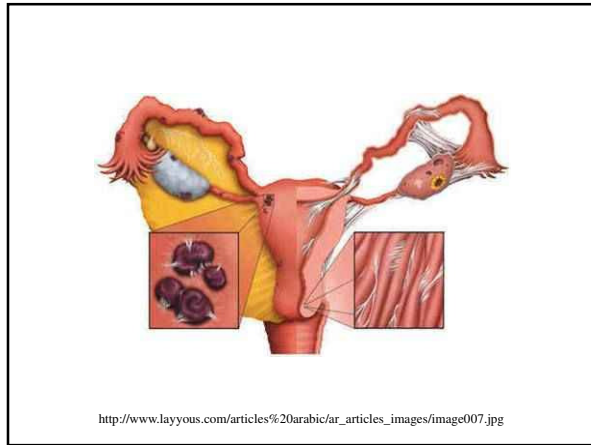
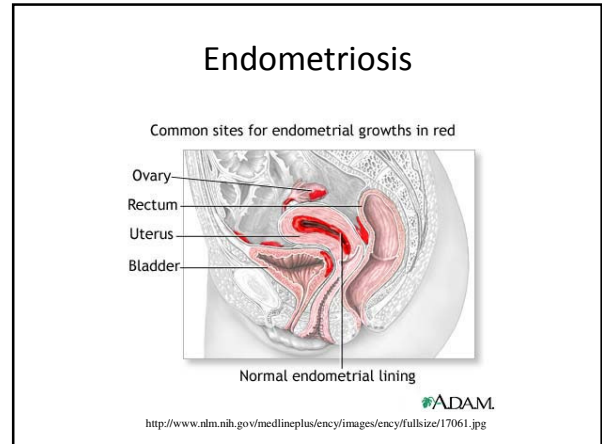
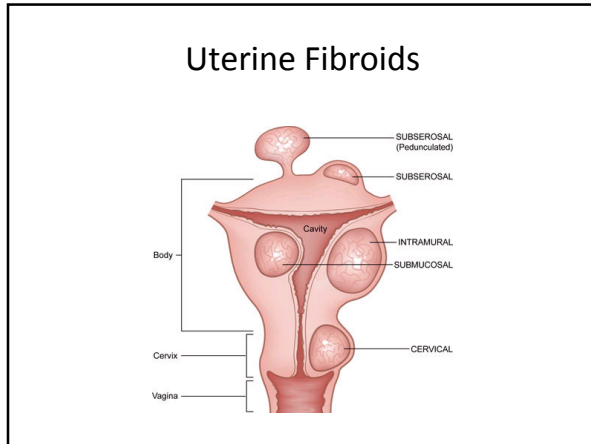
Abnormal Growths cont'd

endometrial implants = specific to endometriosis, the growth of endometrial cells outside of the uterus

- implants grow and change in response to hormonal changes through the cycle

adhesions = scar tissue formed in an area of chronic inflammation or tissue injury

- may bind organs or different tissues together



Clinical Presentation of Endometriosis

Dysmenorrhea = bad/difficult menstruation

- pain and/or spotting between periods
- pain may be knife-like
- pain may be cramp-like
- pain with sexual intercourse
- feeling of 'congestion' in the pelvis/abdomen

Possibly:

- pain and or blood with urination
- pain or blood with defecation

Notes on Endometriosis

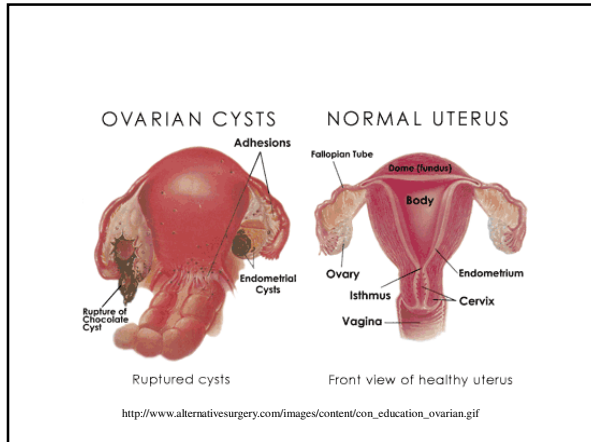
Risk factors:

- Female, age 30-40
- No children
- Family history
- Chronic candidiasis *

Comparison

What fibroids and endometriosis have in common:

- abdominal 'fullness', pressure
- frequent urination
- heavy periods (menorrhagia)
- very painful/difficult periods (dysmenorrhea)
- symptoms subside after menopause



Endometriosis: Complications

- Anemia (due to menorrhagia)
- Infertility (adhesions, hormone imbalance)
- Intestinal obstruction (adhesions)
- Ureteric obstruction (adhesions)
- Rupture of endometrioma (“chocolate cyst”)

Possible Etiologies: Endo

- Retrograde menstruation (backflow of blood)
note: comment about tampons in spiral book
- Estrogen dominance → estrogen dominance protocol
- Immune dysfunction → over-active immune protocol
- Chronic candidiasis or other infection → dysbiosis protocol

Remember...

- Painful condition = inflammation → Anti-inflammatory diet

Estrogen Dominance Protocol

1. **Improve liver’s estrogen detoxification:**
= I-3-C rich foods, vitamin B-6, Mg, zinc, liver protocol
2. **Support healthy gut ecology:** soluble fibers, probiotics, dysbiosis protocol
3. **Reduce xeno-estrogen exposure:**
= use only paraben-free products
= don’t microwave in plastic (esp. fatty foods)
= buy organically grown foods

Estrogen Dominance Protocol

4. **Counteract xeno-estrogens:**
Consider natural progesterone therapy:
 - Vitex agnus-castus (chaste tree berry)
 - Use soy products modestly
5. **Reduce body fat to age-appropriate %**
 - curb excess dietary carbohydrates, fats
 - increased exercise

Comparing Breast Diseases

Breast Cancer may exhibit as:

- **painless** lump in armpit/breast
- change in breast size/shape
- 'orange peel' breast appearance (inflammatory BC)
- lump is immovable
- crusting or scaling on nipple
- nipple discharge
- inverted nipple

All breast cancer is *malignant* (life-threatening)
-occurs in ducts or lobes

Fibrocystic Breasts

- (fluid-filled cysts)
- lumps are often **painful** (more so before menses)
 - lumps move freely
 - lumps 'come and go'
 - lumps are *benign* (non-threatening)

- **Not** a risk factor for cancer
- occurs in lobes

Recommendations for FBD

- reduce caffeine intake (all sources)
- vitamin E 400 i.u.
- iodine (if subclinical hypothyroidism)
- GLA (from borage or evening primrose oil)
- estrogen dominance protocol

Peri-/Menopause

Peri-menopause: ovaries have less hormone output

- Signs and symptoms: vaginal dryness, irregular periods, hot flashes, night sweats, reduced libido, insomnia, joint pain, migraines

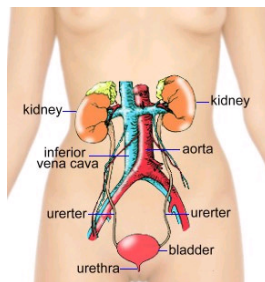
Menopause: cessation of menstrual period (Dx:1 year without a period)

- Ovaries fully 'retired'; atrophy
- Peri-symptoms continue/exacerbate except for hot flashes
- Estrogen and progesterone will be low

Nutritional support for Peri-Menopausal Women

- B complex
- Calcium and magnesium +D
- Phyto-estrogens
- Wild yam extract
- Vitamin E
- GLA (evening primrose oil)

The Urinary System



<http://www.worsleyschool.net>

Cystitis

= UTI (urinary tract infection)
prevalence: females

Etiologies:

- infection by e.coli or yeast

Risk Factors:

- high consumption of refined carbohydrates
- diabetes
- poor hygiene
- under-active immune system
- dehydration

Cystitis cont'd

Signs and symptoms:

- painful, frequent urination
- incomplete urination
- cloudy, dark urine
- possibly blood in urine
- abdominal cramping (like menstruation)
- lower back ache

Complications of Cystitis

- pyelonephritis (kidney infection)
- kidney damage (scarring)
- dialysis or transplant

Help for Acute Cystitis

- pure water
- d-mannose
- goldenseal tincture* (anti-microbials)
- uva ursi*
- licorice root, marshmallow root teas
- DGL
- underactive immune protocol

Recommendations for Prevention

- regular hydration!
- unsweetened cranberry or blueberry juices
- avoid caffeine, alcohol
- reduce refined sugars, fruit juices
- address dysbiosis
- Lifestyle: after urination, wipe from front to back ONLY

Kidney Stones ("Renal calculi")

- Usually composed of *calcium oxalate*

Etiologies

- heredity
- acid-forming diet
- dietary oxalates??

Complication: hydronephrosis

Renal Colic (kidney stone-dislodgement) Symptoms

- Excruciating mid-lower back pain
- painful urination
- bloody urine

Prevention

- reduce high-oxalate foods: coffee, cocoa, spinach, collards, parsley, kale, beer, beets, chard, rhubarb and black tea
- consume plenty of vegetables and fruit
- minimize animal protein
- adequate water intake
- avoid "soft drinks"
- keep Ca : P ratio low

Other kidney diseases

Glomerulonephritis

- auto-immune, chronic inflammatory
- smoky or coffee-coloured urine
- arthralgia and shortness of breath
- medical emergency

Polycystic Kidney Syndrome

- genetically inherited cystic condition
- grossly enlarged kidneys due to cysts
- Clinical aspect: secondary hypertension, lumbar pain
- End result: kidney failure