GYNECOLOGICAL INFECTIONS AND ABNORMALITIES

SFC WARD



# Dysmenorrhea

- Most common cause of pelvic pain in females.
- Definition menstrual pain
- Etiology -
  - Obstruction and anatomical cervical stenosis, fibroids, anteflexion of uterus, PID
  - Endocrine excessive production of prostaglandins which intensify uterine contractions.



## Dysmenorrhea

- Management.
- NSAIDS (nonsteroidal anti inflammatory drugs).
- Oral contraceptive.
- Adequate rest and sleep and regular exercise may be beneficial.
- Heating--baths, soaks, showers and heating pad.

• Muscle relaxants--PRN for cramping. Joint Special Operations Medical Training





• Definition--is a distinct clinical entity characterized by a cluster of physical and psychological symptoms that are limited to a week or 10 days, preceding menstruation and are relieved by onset of the menses.



 Known precipitating factors include an increase in antidiuretic hormone and aldosterone secretion, as well as estrogen-progesterone imbalance.





- PMS increases with age and body weight.
- Uncommon in women in their teens and twenties.





- Symptoms.
- Physical.
- Painful and swollen breast.
- Bloating.
- Abdominal pain.
- Headache and back pain.



Psychologically.
Depression.
Anxiety.
Irritability.
Behavioral changes.



- Treatment.
- Past treatment has been symptomatic.
- Diuretics to reduce fluid retention.
- Tranquilizer drugs for mood changes. Diazepam 2 5 mg TID orally.
- Analgesics for pain, mild pain ASA 600 mg orally Q 4 6 hrs PRN.

• Program of regular sleep and exercise. Joint Special Operations Medical Training





- Treatment.
- Decrease salt intake to relieve bloating and edema.
- Drug therapy should be avoided, when possible.



 Definition--Pelvic Inflammatory Disease (PID) is any acute, subacute, recurrent, or chronic infection of the oviducts, and ovaries, with adjacent involvement.

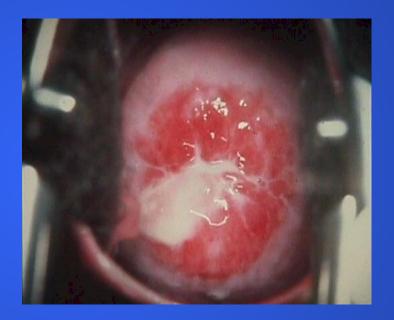




 Sites - it includes inflammation of the cervix (cervicitis) uterus (endometritis) fallopian tubes (salpingitis) and ovaries (oophoritis) which can extend to the connective tissue lying between the broad ligaments (parametritis).



 Cervicitis.
Definition--infla mmation of the cervix.







 Causative organisms - gonococcus, streptococcus, staphylococcus, aerobic and anaerobic organisms, herpes virus, and chlamydia.





• Forms of cervicitis--

• Acute and Chronic.





- Acute cervicitis.
- Symptoms.
- Purulent, foul smelling vaginal discharge.
- Itching and/or burning sensation.
- Red, edematous cervix.
- Pelvic discomfort.
- Sexual dysfunction > infertility.



- Acute cervicitis.
- Assessment.
- Physical examination.
- Cultures for N. gonorrhea are positive greater than 90% of the time.
- Cytologic smears.
- Cervical palpation reveals tenderness.
- Management based on culture results.





- Chronic cervicitis.
- Symptoms.
- Cervical dystocia--difficult labor.
- Lacerations or eversion of the cervix.
- Ulceration vesicular lesions (when cervicitis results from Herpes simplex



- Assessment.
- Physical examination.
- Chronic cervicitis, causative organisms are usually staphylococcus or streptococcus.



• Management - manage by cauterization, cryotherapy, conization (excision of a cone of tissue).





- Endometritis.
- Definition inflammation of the endometrium.
- Etiology produced by bacterial infection most commonly staphylococci, colon bacilli, or gonococci, trauma, septic abortion



- Endometritis.
- Etiology produced by bacterial infection most commonly staphylococci, colon bacilli, or gonococci, trauma, septic abortion.
- Sites uterine ligaments, (uterosacral, broad, round) and ovaries, (extra uterine locations).



#### NOTE

• Endometriosis - ectopic endometrium located in various sites throughout the pelvis or on the abdominal wall.









- Endometriosis
- Symptoms.
- Low back and low abdominal pain.
- Dysmenorrhea.
- Menorrhagia.
- Pain on defecation, constipation.
- Sterility.



- Endometriosis
- Assessment.
- Physical examination.
- Vaginal cultures.
- Management based upon culture results.



- Salpingitis and Oophoritis.
- Definition infection of the fallopian tubes and ovaries.
- History usually recent sexual intercourse, insertion of an IUD, or a recent childbirth or abortion, gonococcus, chlamydia, streptococcus, and anaerobes have been implicated as causative organisms



- Salpingitis and Oophoritis.
- Signs and symptoms.
- Lower abdominal pain sometimes with signs and symptoms of acute abdomen can be unilateral or bilateral.
- Fever.

 Severe pain with palpation of the cervix, uterus, and adnexa (Chandelier sign).
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- Salpingitis and Oophoritis.
- Signs and symptoms (cont.)
- Purulent cervical discharge.
- Leukocytosis.





- Salpingitis and Oophoritis.
- Assessment.
- Physical examination.
- Gonorrhea culture.
- Test for chlamydia.



- Salpingitis and Oophoritis
- Complications.
- Tubal abscess.
- Infertility--common.





- Salpingitis and Oophoritis
- Management.
- IV fluids to correct dehydration.
- NG suction in the presence of abdominal distention or ileus.
- Manage the associated symptoms.
- Bedrest and restrict oral feedings.



# OTHER GYN ASSOCIATED ABNORMALITIES.



# Ovarian Cyst







# Ovarian Cyst

- Ovarian cysts are usually nonneoplastic sacs on an ovary that contain fluid or semisolid material.
- Ovarian cysts are frequently asymptomatic, but the pressure of an abnormal mass may cause discomfort, aching, or heaviness to the pelvic region and on abdominal organs.



# Ovarian Cyst

- Sudden or sharp pain may indicate rupture, hemorrhage, or torsion of cyst.
- Fever, leukocytosis or s/s of shock may be present.





# OTHER GYN ASSOCIATED ABNORMALITIES

Leukorrhea white/yellowish mucoid discharge from cervical canal or vagina.



# Leukorrhea

- Probably most frequently encountered gynecological symptom.
- Generally associated with simple infection of the cervix and vagina.



OTHER GYN ASSOCIATED ABNORMALITIES VAGINITIS - Inflammation of the vagina

- Candidiasis
- Trichomonas
- Gardnerella
- Bartholin's abscess



# Monoliasis or Candidiasis







# Monoliasis or Candidiasis

- Signs and symptoms.
- Marked leukorrhea, marked redness of vulva, extreme pruritus.
- White, creamy, cheesy, sweet smelling discharge, thrush patches.
- Commonly seen in pregnancy, diabetics, women on BCP or antibiotics (ampicillin).



# Monoliasis or Candidiasis

- Assessment lab KOH wet mount NS KOH 10% 20% look for (branching Hyphae or Mycelium fungus nails).
- Management Nystatin--intravaginal adult tabs 0.1 to 0.2 million units daily times 7 to 10 days.



## Trichomonas Vaginitis





# Trichomonas Vaginitis

- Signs and symptoms.
- Leukorrhea, vaginal soreness, burning, pruritus, dyspareunia (pain during intercourse).
- Bubbly, yellowish thick discharge, foul smelling.
- Strawberry appearance of cervix.



- Trichomonas Vaginitis • Assessment - lab wet prep, microscopic exam reveals pear shaped parasite with long flagella and undulated (wavy outline in appearance) cell membrane.
- Management.
- Metronidazole (Flagyl) anti protozoal 250 mg TID to 500 mg BID orally for 5 days.
- Patient education of feminine hygiene, douching.

• Management based on culture results. *Joint Special Operations Medical Training* 





Bacterial Vaginitis (Gardnerella vaginitis)

- Signs and symptoms.
- Leukorrhea, pruritus, dyspareunia.
- Turbid, chalky, white/gray or yellowish discharge; malodorous ("fishy").





Bacterial Vaginitis (Gardnerella vaginitis)

- Assessment.
- Gram-positive nonmotile coccobacillus that normally inhabits the vagina.
- Wet smears of this nonspecific vaginitis yields vaginal desquamated epithelial cells covered with many bacteria.



Bacterial Vaginitis (Gardnerella vaginitis)

- Management.
- Metronidazole (Flagyl) 250 mg TID to 500 mg BID orally for 7 10 days.
- Ampicillin 500 mg QID x 7 days.
- Douching with povidone iodine solution.
- About 25% of the patients have recurrence and require treatment in 2 3 months.

• Management based on culture results. Joint Special Operations Medical Training





# Perineal pain -Bartholin's abscess

- Definition and etiology acute or chronic infection of the Bartholin's gland (streptococci, staphylococci, E. coli, anaerobes; may result in infection).
- History recent intercourse, venereal disease, trauma, spontaneous abortion, wiping from rectum to vagina.



# Perineal pain -Bartholin's abscess

- Signs and symptoms.
- Mass in perineum that is hot, tender, and fluctuant.
- Pus draining from Bartholin's duct.













# Perineal pain -Bartholin's abscess

- Management.
- I & D.
- Sitz bath.
- Broad-spectrum antibiotics which cover gram-positive organisms and some common vaginal gram-negative organisms.



# BREAST ABNORMALITIES.





#### Acute Mastitis

- Definition bacterial infection of breast.
- Time confined generally to the first 2 months of lactation.
- Organism usually staphylococcus, sometimes streptococcus.
- RULE signs and symptoms of mastitis in female; rule out cancer



#### Acute Mastitis

- Signs and symptoms.
- Pain in the breast.
- Withdraw from palpation.
- Erythema.
- Induration.
- Hot.



#### Acute Mastitis

- Management.
- Prevention by good hygiene.
- Preabscess--antibiotics.
- Abscess I & D.





# Chronic Cystic Mastitis

- Benign pathology fibrocystic syndrome.
- Age begins in twenties and increases with age.
- Signs and symptoms.
- Single or multiple cysts.
- Pain/tenderness.
- Nodular, well defined cysts.

• Smooth, firm, mobile cysts. Joint Special Operations Medical Training





Chronic Cystic Mastitis

- Significance increased incidence of breast cancer 3-5 times.
- Management.
- Rule out cancer.
- Avoid caffeine and tobacco products, may need referral to rule out cancer; follow-up patient education.
- NOTE: In a field environment have patient return for follow up.

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- Primary Malignancy
- Origin--primarily the ducts.
- Incidence.
- Major cancer killer of females.
- 1 out of 11 females.
- 130,900 new cases/year.
- Mortality--41,300 deaths in 1987.



- Risk factors.
- Age, over 40.
- Sex F:M = 100:1.
- Family history of breast cancer.
- Personal history.
- Early menarche.
- Pregnancy or first child after 30 higher risk.



- Signs and symptoms
- Persistent lump or thickening, hard irregular mass.
- Fixation--tumor invades surrounding tissue.
- Dimpling--shortening of Cooper's ligament.
- Nipple retraction, scaliness or discharge.



- Signs and symptoms.
- Invade skin--ulcer, satellite.
- Peau d'orange--invasion of lymphatics causes edema.
- Hard, matted, fixed axillary or supraclavicular nodes.



- Signs and symptoms.
- Bloody nipple discharge.
- Metastasis--bone pain, fracture, lung, liver.
- Pain or tenderness.





- Assessment.
- Physical exam suspicion.
- Self breast exam suspicion.
- Mammogram X ray exam of the breast.
- Needle biopsy--small masses.
- Management surgical; chemotherapy.



- Survival increases with early diagnosis because size of lesion is smaller and lymph nodes are not involved.
- Metastatic malignancy of the breast systemic involvement; breast changes during pregnancy with some cancer characteristics (unexplained weight loss).



#### **Breast Abnormalities**

 Metastic malignancy of the breast systemic involvement; breast changes during pregnancy with some cancer characteristics (unexplained weight loss).



# BREAST CHANGES DURING PREGNANCY



## Breasts in Pregnancy

Physical Findings -

- Tenderness.
- Increase in size and veins.
- Nipples increase in size and pigmentation.
- Mammary glands enlarge.
- Colostrum--first milk, more protein, more minerals, IgA, less sugar.



# Breasts in Pregnancy

- Lactation.
- Milk letdown in response to suckling or crying.
- Requires adequate fluids.
- Production corresponds to demand.
- Encourage maternal bonding and uterine involution.

• Breast increase in size, veins, and warmth. *Joint Special Operations Medical Training* 





# Breasts in Pregnancy

- Lactation.
- Most drugs ingested are secreted.
- Engorgement--manage with binder, ice, codeine.
- Suppression--ice, binder, analgesics, Parlodel.
- Fissures--manage with nipple shield and topical meds, pump.
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#### Lactation

• Agalactia - complete lack of milk, very rare.

• Polygalactia - excess milk.





# SUMMARY

• Evaluation and management of gynecologic infections and abnormalities require the ability to recognize normal structures and physiology.



## SUMMARY

• From that point, one must be able to categorize the problem into an anatomical, traumatic malignancy, or infection problems.



## SUMMARY

 Knowing the key signs and symptoms for each of these categories will ensure your ability to reach the best assessment without the common hospital aid at your disposal in the field environment. Joint Special Operations Medical Training Contor

# QUESTIONS???



