Assessment and Management of Women with Benign Breast Conditions, Abnormal Uterine Bleeding and STIs

Satellite Conference and Live Webcast
Thursday, November 19, 2015
9:00 – 11:00 a.m. Central Time

Produced by the Alabama Department of Public Health
Video Communications and Distance Learning Division

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Program Objectives

- Discuss and define benign breast disease with emphasis on pathophysiology and clinical management
- Outline clinical presentation of varied benign breast diseases and needed assessment, plan, and follow – up

Benign Breast Disease

- Benign breast disease is a heterogeneous group of conditions including congenital anomalies, inflammatory lesions, nipple discharge, and palpable and non-palpable abnormalities

Benign Breast Disease

- Clinical Presentation:
  - Palpable mass
  - Nipple discharge
  - Mastalgia
  - Inflammatory process
  - Non-Palpable Abnormality

Benign Breast Conditions

- Benign breast conditions may represent subclinical breast cancer therefore breast cancer is always the diagnosis for exclusion or confirmation

Breast Gland

- Each breast has 8 to 10 sections (lobes) arranged like the petals of daisy
- Inside each lobe are many smaller structures called lobules
- At the end of each lobule are tiny sacs (bulbs) that can produce milk

Benign Breast Disease

- Congenital Anomalies consists of:
  - Aberrant breast tissue
  - Amastia
  - Inverted nipple

Benign Breast Disease

- Adolescent Development Disorders :
  - Asymmetry
  - Macromastia
  - Hypoplasia
  - Tuberous breast development
  - Gynecomastia

Benign Breast Disease

- Mastalgia is breast pain that is classified by history as cyclical or noncyclical breast pain
- Differential diagnosis should include medical non-breast related problems, inflammatory/infections and malignancy

Mastalgia (Continued)

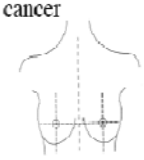
- Differential Dx(s):
- Costochondritis Irritation of pleura
- Cervical Radiculopathy
- Rib fracture Shingles
- Myocardial Ischemia
- Pneumonia Esophageal Spasm

Benign Breast Disease

- Fibrocystic Change is a benign condition that includes formation of cysts, hyperplasia of ductal epithelium without atypia or malignancy, and stromal changes, including fibrosis

Mammography Voucher

11. Results of CBE:
    - ❑ Normal exam
    - ❑ Benign findings, not suspicious for cancer
    - ❑ Discrete palpable mass
    - ❑ Bloody or serous nipple discharge
    - ❑ Nipple or areolar scaliness
    - ❑ Skin dimpling or retraction



Benign Breast Disease Inflammatory Lesions

Mastitis

- **Lactational Infections**
- **Nonlactational Infections**

Benign Breast Disease

- **Nipple Discharge**
  - **Galactorrhea, Physiologic, and Pathologic**
- **Intraductal Papillomas**
- **Duct Ectasia**

Benign Breast Disease

- **Hyperplasia**
  - **Ductal Hyperplasia**
  - **Lobular Hyperplasia**
  - **Atypical Hyperplasia**

Benign Breast Disease Palpable Breast Masses

- **Fibroadenoma**
- **Lipoma**
- **Hamartoma**
- **Phyllodes Tumors**

Benign Breast Disease Palpable Breast Mass

- **Fibromatosis**
- **Lactating Adenoma**
- **Nipple Adenoma**
- **Sclerosing Adenosis**
- **Granular Cell Tumors**

Benign Breast Disease

- **Documentation of CBE mass findings: Left or right breast with location by clock-face position and centimeters(cm) from the areola, size in cm, shape, mobile or fixed, tender or non-tender, associated skin changes and lymphadenopathy**

Benign Breast Disease

- **Diagnosed Benign Breast Conditions where patient is not under surgical care yearly and lesion remains clinically unchanged, continue annual u/s, biannual clinical breast exam, and monthly self breast exams.**

Red Flags of CBE Findings

- **Skin changes(erythema, Peau d' orange, edema, scaling/excoriation, retraction, dimpling, puckering, nipple discharge, palpable mass, lymphadenopathy, persistent breast pain**

CANCER UNTIL PROVEN OTHERWISE

Mammogram Assessment Categories

- **Category 0 - Incomplete, needs additional imaging**
- **Category 1 -Negative**
- **Category 2 - Benign Findings**
- **Category 3 - Probably benign findings- short term follow-up suggested**

MMG Categories (Continued)

- **Category 4 - Suspicious abnormality- biopsy indicated, subcategory - 4 A - low suspicion for malignancy, 4 B - intermediate, and 4 C - moderate**
- **Category 5 - Highly suspicious of malignancy**
- **Category 6 - Known biopsy proven malignancy**

ACOG Breast Screening

- **Breast Screening starts 40 years old and annually thereafter**
- **CBE at 19 years old**
- **Breast Self Awareness has the potential to detect breast cancer and can be recommended**

Alabama Breast and Cervical Cancer Program's 10-year Breast Cancer Screening Stats

References

- Objectives - ACOG, Benign Breast Disease, Clinical Updates In Women's Health Care, Vol XIV, No.3, July 2015
- Green, V. and Weiss, P. *Breast Disorders, Clinic Review Articles,* Elsevier Inc. Vol.40, No.3, September 2013, pp 459-473.
- Centers for Disease Control (CDC), National Breast and Cervical Cancer Early Detection Program, August 2015.

References

- Center for Disease Control (CDC). National Breast and Cervical Cancer Early Detection Program, August 2015.
- Georgia Breast and Cervical Cancer Program Health Promotion Disease Prevention Program, Department of Public Health, September 2010, pp 10-27.

Reference

- Medscape,emedicine.medscape.com/article/1253816. *Benign and Malignant Soft Tissue Tumors, Jan. 27, 2015.*

Abnormal Bleeding and Differential Diagnosis

- Define the descriptive terms used to characterize abnormal menstrual bleeding patterns
- Demonstrate utilization of differential diagnosis in development of a plan of care in a woman with abnormal uterine bleeding

Differential Diagnosis

Differential Diagnosis

- Two Important Components
  1. Communication with Patients
  2. Eliciting Reliable History

Differential Diagnosis

Bridge The Gap Between . . .

Differential Diagnosis

Chief Complaint

and

Formulation of the

Correct Diagnosis

Differential Diagnosis

Step By Step

Differential Diagnosis

1. Complaint

Differential Diagnosis

2. History of Complaint
   - A. Symptoms
   - B. Directed questions to ask

Differential Diagnosis

- Onset
- Location / Radiation
- Duration / timing
- Character
- Associated Symptoms

Differential Diagnosis

- Aggravating or triggering factors
- Alleviating factors
- Effects on daily life

Differential Diagnosis

C. Assessment, Cardinal Signs and Symptoms

Differential Diagnosis

D. Medical History: General medical history (Subjective), History specific to complaint (Directed)

Differential Diagnosis

- Relevant past medical history
- Family history
- Social history

Differential Diagnosis

3. Physical Examination

   Vital signs and general appearance

Differential Diagnosis

- Physical Examination should be directed toward Chief Complaint
- Physical Examination may provide the diagnosis without need for further testing

Differential Diagnosis

- Physical Examination may reveal unsuspected findings, or
- NO findings are revealed to support the original diagnosis

Differential Diagnosis

- Testing
  - Basic Tests
  - Move from screening to elaborate testing, if needed

Differential Diagnosis

- Lab Testing – Initially in Public Health
  - Hcg
  - Hgb
  - TSH – Thyroid Function Studies
  - Cervical Cancer Screening
  - Cervical or Urine Cultures (CT/GC/TV)

Differential Diagnosis

4. History and Physical Examination findings

Differential Diagnosis

5. The Differential Diagnosis compares typical symptoms of medical conditions with the results of the patients history and physical exam

Differential Diagnosis

6. The Practitioner can then decide if additional testing is needed in order to facilitate arriving at the correct diagnosis

Re - Evaluate

Differential Diagnosis

7. Clinical decision making

(most likely diagnosis)

Differential Diagnosis

- **The depth of one's differential diagnosis is determined by the breadth of knowledge by the provider**

Differential Diagnosis

- **Abnormal Uterine Bleeding**

Abnormal Uterine Bleeding (AUB)

- **Terms no longer used – OLD, OLD**
  - **Menorrhagia**
  - **Metrorrhagia**
  - **Polymenorrhea**
  - **Oligomenorrhea**
  - **Dysfunctional uterine bleeding**

Abnormal Uterine Bleeding

- Abnormal Uterine Bleeding (AUB)
- Heavy Menstrual Bleeding (AUB/HMB)
- Inter-menstrual Bleeding (AUB/IMB)

Abnormal Uterine Bleeding

- PALM – Structural Causes
- COEIN – Nonstructural Causes

Classification AUB PALM-COEIN

P - polyp (AUB - P)

A - Adenomyosis (AUB - A)

L - Leiomyoma (AUB - L)

Submucosal myoma (AUB - Lsm)

Other myoma (AUB - Lo)

M - Malignancy & Hyperplasia (AUB - M)

Abnormal Uterine Bleeding PALM-COEIN

C - Coagulopathy (AUB - C)

O - Ovulatory dysfunction (AUB - O)

E - Endometrial (AUB - E)

I - Iatrogenic (AUB - I)

N - Not yet classified (AUB - N)

Abnormal Uterine Bleeding

- Medications contributing to AUB
  - Warfarin
  - Heparin
  - Non-Steroidal Anti-inflammatory (NSAIDs)
  - Hormonal Contraceptives

Abnormal Uterine Bleeding

- Ginko
- Ginseng
- Motherwort
- St. John's Wort

Abnormal Uterine Bleeding

- Patient can have more than one cause for abnormal uterine bleeding

Anovulatory Bleeding

- Characterized by heavy, irregular unpredictable bleeding

Anovulatory Bleeding

- Causes

  1. Physiologic
  2. Pathologic

Anovulatory Bleeding

Physiologic

- Adolescence
- Peri-menopause
- Lactation
- Pregnancy

Anovulatory Bleeding

Pathologic

- Hyperandrogenic anovulation, adrenal hyperplasia, or andogen-producing tumors
- Hypothalamic dysfunction (anorexia)
- Hyperprolactinemia
- Thyroid disease

Anovulatory Bleeding

- Primary Pituitary disease
- Premature ovarian failure
- Latrogenic (ie. Secondary radiation or chemotherapy)
- Medications

Ovulatory Cycle

- **Normal Menstrual Cycle**
  - **Interval lasts between 21 - 35 days (mean 28 days)**
  - **Duration 4 - 6 days (mean 5 days) (most blood lost the first 3 days)**
  - **Volume variable - approx. 30 - 35 ml**

Menstrual Cycle

- **Abnormal Menstrual Cycle**
  - **Interval less than 21 days or greater than 35 days**
  - **Duration less than 2 days or greater than 8 days**
  - **Volume greater than 80 ml**

Abnormal Uterine Bleeding

- **It is excessive bleeding when she says it is excessive!**

Ovulatory Bleeding

- **Characterized by amenorrhea to heavy irregular menstrual periods**

Abnormal Uterine Bleeding

- **One-third of all patient visits to the gynecologist are related to abnormal uterine bleeding**
- **70% are during the perimenopausal / menopausal years**

Abnormal Uterine Bleeding

- **20% of women presenting with abnormal uterine bleeding have some type of bleeding disorder**

Abnormal Uterine Bleeding

- Endometrial ablation does not provide contraception

Abnormal Uterine Bleeding

- Post-coital bleeding results from:

Postcoital Bleeding

- Benign growths
  - Endometrial polyps
  - Cervical polyps
  - Cervical ectropion

Postcoital Bleeding

- Infection
  - Cervicitis
  - Pelvic Inflammatory Disease
  - Endometritis
  - Vaginitis

Postcoital Bleeding

- Genital/vulvar lesions
  - Herpes simplex virus
  - Syphilis
  - Chancroid
  - Lymphogranuloma venereum
  - Condyloma accuminata

Postcoital Bleeding

- Benign Conditions
  - Vaginal atrophy
  - Pelvic organ prolapse
  - Benign vascular neoplasms
  - Endometriosis

Postcoital Bleeding

- **Malignancy**
  - **Cervical Cancer**
  - **Vaginal Cancer**
  - **Endometrial Cancer**

Postcoital Bleeding

- **Trauma**
  - **Sexual abuse**
  - **Foreign bodies**

Abnormal Uterine Bleeding

Age-Based Common Differential Diagnosis

- **13 - 18 years**
  - **Persistent anovulation**
  - **Hormonal contraception use**
  - **Pregnancy**
  - **Pelvic infection**
  - **Coagulapathies**
  - **Tumors**

Abnormal Uterine Bleeding

Age-Based Common Differential Diagnosis

- **19 - 39 Years**
  - **Pregnancy**
  - **Structural lesions**
  - **Anovulatory cycles**
  - **Hormonal Contraception**
  - **Endometrial hyperplasia / Carcinoma**

Abnormal Uterine Bleeding

Age-Based Common Differential Diagnosis

- **40 Years to Menopause**
  - **Anovulatory bleeding**
  - **Endometrial hyperplasia / Carcinoma**
  - **Endometrial atrophy**
  - **Leiomyoma**

Case Study # 1

- **16 year old with c/o prolonged heavy menstrual flow with increased cramping over the last 8 days**
- **Past menstrual periods reported as normal**
- **Periods were usually 26 – 28 days; varied sometimes with some clots**

Case Study # 1

- Physical Examination Specific to OB/GYN was normal with exception of:
  - Abdomen – deep palpation suprapubic tenderness
  - Pelvic /speculum exam – large blood clots and heavy bleeding noted. Cervix is closed, vaginal mucosa appears normal, CMT positive for tenderness

Case Study # 1

- Bimanual exam – enlarged uterus approximately 8 week size; noted tenderness with palpation

Case Study # 1

- What is the differential Diagnosis?
  - PID or pelvic infection – sexually transmitted infection
  - Missed AB?
  - Clotting Disorder?
  - Possible UTI?
  - Other?

Case Study # 1

- What other tests need to be done?
  - CT/GC/TV?
  - Hcg.?
  - Hgb.?
  - Urinalysis?
  - Other?

Case Study # 1

- Tests reveal:
  - Positive Hcg.
  - Hgb. 7.2
- What is your Clinical Decision?

Case Study # 1

- Heavy Menstrual Bleeding Causes:
  - Hormonal Imbalance
  - Uterine Fibroid
  - Endometrial Polyps
  - Infection
  - Endometrial Cancer
  - Intrauterine devices
  - Contraceptives
  - Pregnancy
  - Coagulopathies

Case Study # 1

- Directed Questions to ask:
  - A good way to ask this question related to her bleeding is: “Tell me about your periods”

Case Study # 1

- Relevant questions:
  - Sexual activity?
  - Vaginal discharge?
  - History of pregnancy, miscarriage or abortion?

Case Study # 1

- Cardinal Signs for this patient:
  - Heavy bleeding X 8 days
  - Cramping with clots
  - Nausea
  - No contraception (denies having sex)

Case Study # 1

- General Medical
  - Family History - Others with problems of heavy bleeding?
  - Medical history - Specific to complaint

Case # 2

- 33 y/o G1P1 in for FPA. BP 108/60, HR 76, BMI 28, weight 147, non-smoker, current on OrthoTricyclen Lo and wants to continue.
- Chief complaint – irregular spotting on this pill for last six months

Case Study # 2

- Nonsmoker
- No medications; took thyroid medication in past but quit taking it 2 or 3 years ago
- Hcg - negative

Case Study # 2

- Physical Examination
  - Overweight BMI 28 – weight 147
  - H/O ? abnormal thyroid – self d/c meds
  - Thyroid - Mildly diffuse/no nodular lesions
  - Pelvic - speculum and bimanual exam unremarkable

Case Study # 2

- The patient's Thyroid Function tests returned abnormal with elevated TSH and low serum free T4
- Clinical Decision – Hypothyroidism (referral warranted)

Case Study # 2

- Differential Diagnosis?
- Break through bleeding on COCs
- Possible thyroid disorder

Case Study # 3

- 48 y/o BF Gravida 3 Para 1 into clinic for annual exam. Complains of irregular bleeding between periods and prolonged periods. Periods last about 8 days, heavy, with a little cramping.

Case Study # 3

- BP 144/94, weight 178 with BMI 35. Patient states had BTL. Last pap 2013 negative with HPV negative
- H/O HTN on medication but out X 1 week

Case Study # 3

- Physical Examination
  - Cervix parous, no gross lesions; no CMT
  - Bimanual exam – anteverted; 15 – 16 week size, irregular shaped – smooth
  - No adnexal mass palpated bilaterally

Case Study # 3

- Recto-vaginal exam was confirmatory with a small hemorrhoidal tag: FIT was given and reviewed (pt with no insurance and high risk category – counseled that FIT does not replace the need for colonoscopy as that is the specific diagnostic test for colorectal cancer and polyps: FIT is screening test only)

Case Study # 3

- What is your differential diagnosis for AUB?

Case Study # 3

- Anovulatory bleeding
- Endometrial hyperplasia/Carcinoma
- Endometrial atrophy
- Leiomyomas

Case Study # 3

- AUB in this patient is the result of Leiomyoma

Case Study # 4

- 30 year old Gravida 4 Para 3 in for examination and requesting oral contraceptives. The patient states her periods are "normal and lasts two weeks." She has previously used COCs & Depo. Last Depo use 2 years ago.
- Last sexual intercourse two days ago with use of condom but it broke. She does not desire pregnancy and wants better contraception. Smokes ½ ppd

Case Study # 4

- Physical examination:
  - Abdomen – soft; nontender
  - External genitalia – no gross lesions
  - Speculum exam – vagina; pink & rugae without lesions; cervix without lesions
  - Bimanual exam – retroverted; NSSC
  - Adnexa – without masses/nontender
  - Recto-vaginal – deferred

Case Study # 4

- Hcg negative
- Thyroid function studies not done
- No wet mount obtained
- CT/GC/TV cultures done
- Pap smear with HPV obtained

Case Study # 4

- What is your differential diagnosis?
- Structural lesions like polyps, or fibroids
- Anovulatory cycles (like PCOS)
- Use of hormonal contraceptives
- Endometrial hyperplasia/Carcinoma

Case Study # 4

- An abnormal pap smear was returned
- HGSIL with Atypical glandular cells (AGC)

Case Study # 4

- What are her options for contraception?

Case Study # 5

- 59 y/o Gravida 8 Para 2 presented for Cancer Detection Initial visit
- Reports LMP 10 – 15 years ago
- States spotted 2 weeks ago X 1 day – had some pain on right side and the next day spotted again

Case Study # 5

- Medical History for this patient is:
  - Non contributory

Case Study # 5

- Family medical history:
  - Mother had ovarian cancer (age 70s)

Case Study # 5

- Physical examination findings were:
  - Bimanual exam was normal with the exception of:
    - Vagina - Pale atrophic mucosa; creamy pink tinged discharge

Case Study # 5

- The assessment and plan:
  - Normal gyn exam with atrophic vaginitis
  - Patient was instructed to f/u for evaluation of atrophic vaginitis with PMD

Case Study # 5

- The patient returns for examination at age 61
- She states she wears a pad daily due to vaginal bleeding X 4 months

Case Study # 5

- Physical Examination:
  - The exam was normal with the exceptions of: Erythematous vulva
  - Atrophic vagina with erythematous mucosa; pooling of blood tinged serous fluid seen in vaginal canal

Case Study # 5

- What is the Differential Diagnosis?

Case Study # 5

- This patient was referred and found to have adenocarcinoma on endometrial biopsy

Case Study # 5

- Endometrial cancer is one of the most common diagnosed gynecologic malignancies

Case Study # 5

- Epidemiology and risk factors

Case Study # 5

- Clinical Presentation
  - The most common symptom of endometrial cancer is abnormal uterine bleeding - either irregular menses or intermenstrual bleeding, or post menopausal bleeding

References

- Diagnosis of Abnormal Uterine Bleeding in Reproductive-Aged Women." ACOG Practice Bulletin No. 128. American College of Obstetricians and Gynecologists. July 2012 (Reaffirmed 2014).
- "Endometrial Cancer." ACOG Practice Bulletin Number 149, American College of Obstetricians and Gynecologists. April 2015

References

- Hatcher,R.,Trussell, J., Nelson, A., Cates, W., Jr., Kowal, D., & Policar, M. *Contraceptive Technology.* 2011. Ardent Media, Inc., New York, New York.
- "Management of Abnormal Uterine Bleeding Associated with Ovulatory Dysfunction." ACOG Practice Bulletin No. 136. American College of Obstetricians and Gynecologists. July 2013.

References

- "Endometrial Cancer." ACOG Practice Bulletin No 149. American College of Obstetricians and Gynecologists. April 2015.
- "Postcoital Bleeding: A review on etiology, diagnosis, and management. Tarney, C.M. and Han, J. http://dx.doi.org/10.1155/2014/192087.
- Rhoads,J. & Jensen, M., *Eds. Differential Diagnosis for the Advanced Practice Nurse. 2015. Springer Publishing Co., LLC. New York, New York.*

ICD – 10 Codes

- AUB – I N921
- AUB – Ovulatory, intermenstrual N923
- AUB – irregular cycle or periods N925, N926
- Postmenopausal bleeding N950
- AUB (dysfunctional uterine bleeding) N925, N938

2015 STI Treatment Guidelines

- Objective:
  - To identify treatment recommendations for the management of sexual health and clinical issues according to the 2015 CDC guidelines

2015 STI Treatment Guidelines

- This information updates the Sexually Transmitted Disease Treatment Guidelines from 2010
- We as health-care providers have daily opportunities to help promote behavioral changes with our patients to help prevent STIs

STI Treatment Guidelines

- These recommendations are to be used as guidance, they are tools not rules
  - As health care providers we need to tailor this to each patient according to their specific clinical presentation

1. Alternative Treatment Regimens for Gonorrhea

- Second most commonly reported infectious disease
- In 2013 Alabama had the second highest rate of Gonorrhea in the nation per CDC

Gonorrhea (Cont)

- Four of the five states with the highest prevalence of Gonorrhea infections are in the south.

Epidemiology

- Gonorrhea treatment is complicated due to the ability of Neisseria Gonorrhoeae to develop resistance against antimicrobials
- 2007 Fluoroquinolones
- 2010 Dual therapy
- 2015 Azythromycin over Doxycycline

Tx of Uncomplicated Gonorrhea

- Ceftriaxone 250 mg IM single dose

PLUS

Azythromicin 1 g PO single dose

~~OR~~

~~Doxycycline 100 mg PO BID x 7 days~~

GC treatment Pregnant Females

Ceftriaxone 250 mg IM single dose

PLUS

Azythromicin 1 g PO single dose

Retest 3-4 weeks

GC Treatment Pregnant Female Alternative Regimen

Ceftriaxone 250 mg IM single dose

PLUS

Amoxicillin 500 mg PO TID

(Repeat test 3-4 weeks)

GC Treatment (cont)

True PCN or Cephalosporin allergy

~~Azythromicin 2g PO single dose~~

Gentamicin 240 mg IM

PLUS

Azithromycin 2g PO single dose

OR

GC treatment (Cont)

Gemifloxacin 320 mg PO

PLUS

Azithromycin 2g PO

True PCN or Cephalosporin Allergy

- **Call your designated physician or Central Office:**
- **PHA 1: Dr. Karen Landers - 256-383-1231**
- **PHA 2: Dr. Scott Harris - 205-340-2113**
- **PHA 3-11: Dr. Albert White - 205-554-4500**
- **Central Office: - 334-206-5350**

2. Updated Treatment for Chlamydia Infection During Pregnancy

- **Most frequently reported infectious disease in the United States**
- **Prevalence higher in persons less than 25 years old**
- **Annual screening recommended**

Chlamydia Treatment

Azythromycin 1g PO

OR

Doxycycline 100 mg PO BID x 7 days

Chlamydia Treatment Pregnant Females

Azythromycin 1 g PO single dose

~~**OR**~~

~~**Amoxicillin 500 mg PO TID x 7 days**~~

Repeat test in 3-4 weeks

3. Use of Nucleic Acid Amplification Test for the diagnosis of Trichomonas NAAT

- **Highly sensitive and specific test**

Test Sensitivity and Specificity

- Sensitivity
  - Ability of the test to correctly identify those patients with the disease
- Specificity
  - Ability of the test to correctly identify those patients without the disease

Tests

- Aptima Test

  Sensitivity 95.3-100%

  Specificity 95.2-100%

  For vaginal, endocervical or urine specimen
- Wet Mount Poor sensitivity 51-65%

Trichomonas treatment

- Treatment remains the same

  Metronidazole 2g PO single dose

  OR

  Tinidazole 2g PO single dose
- Alternative Tx:

  Metronidazole 500 mg PO BID x 7 days

If Pregnant

- Metronidazole 2 g PO single dose

  Repeat test 3-4 weeks

4. Role of Mycoplasma genitalium in urethritis/cervicitis and treatment related implications

Mycoplasma genitalium

- First identified early 1980's
- Can be a sexually transmitted pathogen
- Cause of male urethritis
- Pathogenic role in women is unclear but may play a role in cervicitis and PID

Mycoplasma genitalium (Cont)

- Slow growing organism
- Culture can take up to 6 months
- Only a few laboratories in the world are able to recover clinical isolates
- NAAT is the preferred method
- FDA approved test not commercially available

Treatment Urethritis and Cervicitis

- Single dose of oral Azithromycin 1 g is currently the recommended treatment, but resistance is rapidly emerging
- Moxifloxacin 400 mg PO x 7,10 or 14 days

5. An aditional Treatment Option for Genital Wart

- Imiquimod 3.75% cream has been added to the list of recommended patient applied treatment regimen for genital warts
- Podophyllin resin is now alternative regimen rather than recommended treatment for external genital warts

6. Updated HPV vaccines recommendations and counseling messages

HPV Vaccines

- Bivalent 2vHPV (Cervarix) 2009 Type 16 and 18 F
- Quadrivalent 4vHPV (Gardasil) 2006 Types 16, 18, 6 and 11 M/F
- 9vHPV (Gardasil) 12/2014 M/F Types 6,11,16,18,31,33,45,52 and 58

HPV Vaccines Schedule

- Routinely vaccinate females & males 11 or 12 years old
  - May begin the series as early as 9 years old
- Females 9-26 years old
- Males 9-21 but can be given up 26 years old

HPV Vaccine Schedule

- HPV vaccine is given in a 3 dose series
  - 1st Dose Now
  - 2nd Dose 1-2 months after 1st dose
  - 3rd Dose 6 months after 1st dose

Tips for Talking with Parents About HPV Vaccine

- Recommend HPV vaccine the same way you recommend other adolescent vaccines
- The "HPV vaccine is cancer prevention" is a message that resonates with parents
- Parents ask: Why vaccinate at 11-12 years old?

Tips for Talking with Parents

- Parents may be concerned that vaccination may be perceived by the child as permission to have sex

HPV

- As of 2014 according to CDC survey 60% of adolescent girls and 42% of boys had received one or more dose of HPV vaccine

HPV

- Remember:
  - Vaccination is not a substitute for cervical cancer screening
  - This vaccine does not protect against all HPV types that can cause cervical cancer
  - Women should still get regular Pap tests

7. Screening Recommendations, Including Hepatitis C, for MSM

- Recommended to screen annually for Hepatitis C if HIV positive or any other risk factors

8. Information on the Clinical Management of Transgender Individuals

- New section for transgender individuals was added to the special population section
  - Trans-women
  - Trans-men

References

- CDC 2015 STD Treatment Guidelines
  - http://www.cdc.gov/std/tg2015/