PHC

432 Handouts

1 Women health

Done By:
Wejdan sager, Shroog Alharbi, Ashwaq Alharbi, Rozan Murshid, Maryam Bin Hadyan, Raghad Al Mutlaq

COLOR GUID: Doctor's Notes Team Notes **Slides** Not important **Important** **431 team work**

Objectives

1. Definition of women health
2. Unique aspects of women health
   a. Diseases affect women differently than men
   b. Health issues unique to women
3. Assessment plan for various health issues and their risk factors throughout a women's life (screening)

I. What is women health

Definition of Women's Health

Women's health is devoted to facilitating the

- Preservation of wellness
- Prevention of illness in women

And includes

- Screening, diagnosis and management of conditions that affect women.

Facts:

- The most common cancer among women of all races is Breast cancer.
- The Leading Cause of Cancer Death Among Women worldwide - except hispanics is Lung cancer.

II. Unique aspect of women health

1. Illnesses affect women differently than men

Some health issues that are common to both men and women affect women differently. Although the symptoms may be similar, the effects/severity of the condition and the care necessary can differ significantly for women.

a. Hypertension:

Hypertension at younger ages was higher in men than in women but among older people (>60 years) it was higher in women

Risk factors:

Genetic predisposition, lifestyle, dietary factors, such as high salt and alcohol intake and obesity.

Complication:

Women have a lower risk of coronary heart disease, stroke, and left ventricular hypertrophy (compared to men)

Hypertension in pregnancy:

May lead to: IUGR, Intrauterine asphyxia and intragenic prematurity + maternal complication ARDS (from pulmonary edema). Cerebral edema, infection DIC, renal failure, hepatic necrosis liver rupture.

b. Diabetes:

Risk factors:

Sedentary lifestyle, Family history, Age over 45, Obese (BMI >30) History of GDM, Family history (first relative) of D.M, Previous macrosomic baby (≥4.5 kg) PCO and Twin pregnancy.

Symptoms unique to women:

1. Vaginal and oral yeast infections and vaginal thrush
2. Urinary infections
3. Female sexual dysfunction

Diabetes and pregnancy:

1. On the mother: Hypoglycemia, Nephropathy , Chronic hypertension, DKA , Infections:
2. On the fetus: Miscarriage , Congenital malformation , Macrosomia , IUGR, IUFD

c. Heart disease:

- Women are more likely to die following a heart attack than men, because they are more likely to experience delays in emergency care and to have treatment to control their cholesterol levels. It show up about 10 years later in women compared to men because of the estrogen.

d. Stroke:

- It is the third leading cause of death for women. Some risk factors are unique to women include:

1. Taking birth control pills

2. Being pregnant (Pregnancy is hyper-coagulable state)
3. Using hormone replacement therapy, a combined hormone therapy of progestin and estrogen designed to relieve menopausal symptoms
4. Having frequent migraine headaches
5. Having a thick waist (larger than 35.2 inches), particularly if post-menopausal, and high triglyceride levels

e. Mental health:

- Women are more likely to report having recently suffered from depression and anxiety disorders.

f. Osteoporosis:

- Women are at greatest risk for osteoporosis after menopause.

g. Osteoarthritis:

- After age 45, the condition is more common in women. The severity of osteoarthritis is usually significantly worse in women than in men.

h. STDs/STIs:

- The effect of STDs/STIs on women can be more serious than men.
- Untreated STDs/STIs can cause infertility, pelvic inflammatory diseases, pre-term delivery, and fetal/neonatal pathologies, ectopic pregnancy, increased risk of HIV transmission or worst cervical cancer.

i. Urinary tract problems:

- Women are more likely than men are to experience urinary tract problems.

j. Autoimmune Diseases:

- These diseases are on the rise among women by about 80 percent.

2. Health issues unique to women

a. Primary dysmenorrhea:

- It is a cramping pain in the lower abdomen occurring just before or during menstruation in the absence of any identifiable pelvic disease. Prevalence rates are as high as 90%.

Clinical presentation and diagnosis:

- Sharp, intermittent spasms of pain, Pain may radiate to the back of the legs or the lower back. Systemic symptoms of NVD , fatigue, fever, headache.

Treatment of Primary Dysmenorrhea:

- NSAIDs
- Oral contraceptives (OCP):
- The pain associated with PMS is generally related to breast tenderness and abdominal bloating، rather than a lower abdominal cramping pain.
- PMS symptoms begin before the menstrual cycle usually 2 wks and resolve shortly after menstrual flow begins.

b. Secondary Dysmenorrhe

- Late onset of dysmenorrhea
- No response to therapy with NSAIDs, OCPs, or both.

Possible Causes of Secondary Dysmenorrhea	
UTERINE CAUSES	*EXTRAUTERINE CAUSES*
Adenomyosis	Endometriosis
Pelvic inflammatory disease	Inflammation and scarring (adhesions)
Cervical stenosis and polyps	Functional ovarian cysts
Fibroids (intracavitary or intramural)	Benign or malignant tumors of ovary, bowel or bladder, or other site
Intrauterine contraceptive devices	Inflammatory bowel disease

***The treatment of secondary dysmenorrhea depend on the cause.**

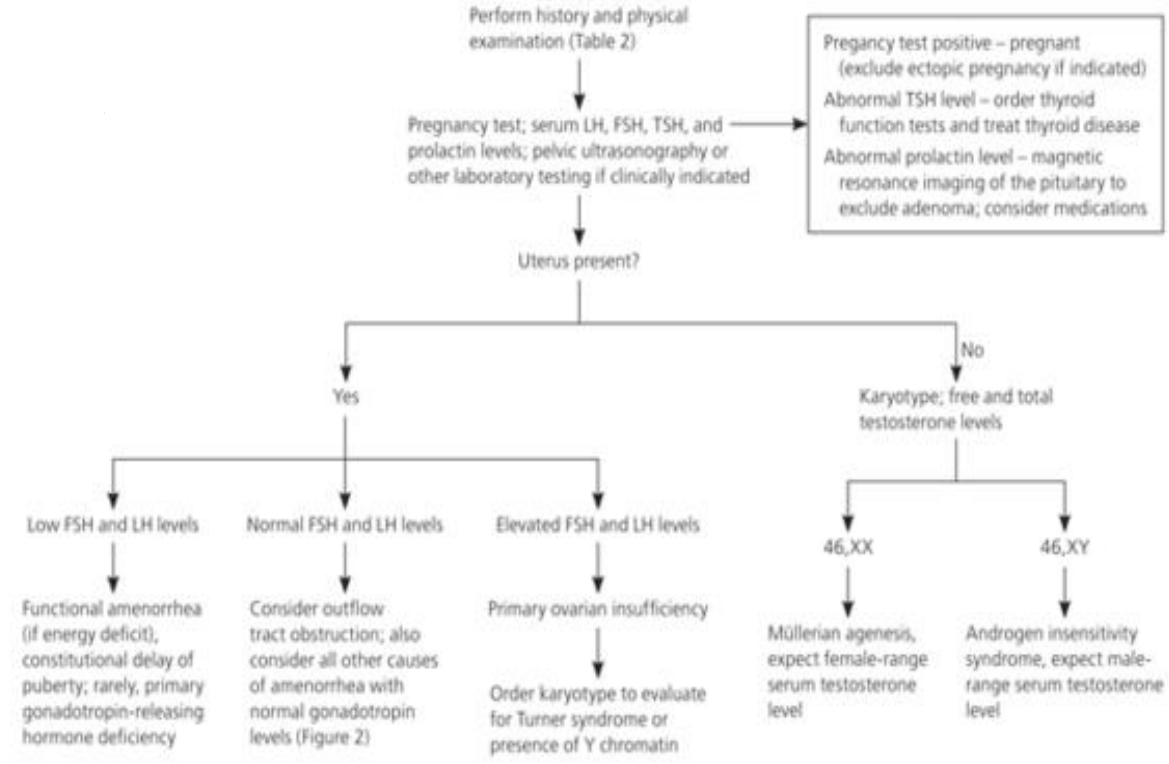
c. Amenorrhea

- Primary amenorrhea: failure to reach menarche.
- Secondary amenorrhea: cessation of previously regular menses for three months or previously irregular menses for six months.
- Normal menstrual cycle typically occurs every 21 to 35 days.

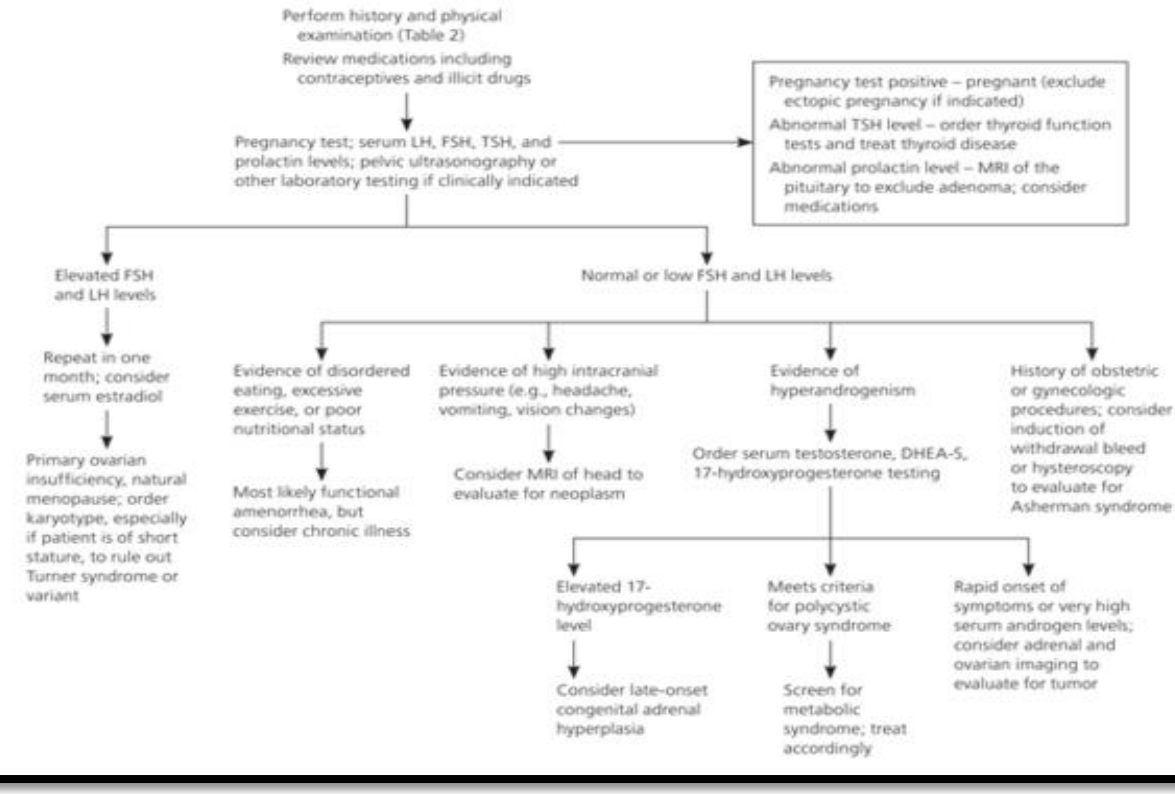
Major Causes of Amenorrhea

- Outflow tract, Primary ovarian insufficiency, Pituitary, Hypothalamic, Other endocrine gland disorders, Physiologic

Diagnosis of Primary Amenorrhea



Diagnosis of Secondary Amenorrhea



d. Vaginitis

Bacterial vaginosis

- Occurs when the normal lactobacilli decline sharply, and the anaerobic bacteria increase due to the increase in vaginal PH (intercourse, douches).

Causative organisms:

- Gardnerella vaginalis, Mycoplasma hominis

Symptoms:

- Discharge: Malodorous; homogenous; clear, white, or gray; fishy odor
- No signs of vaginal inflammation

Criteria for diagnoses (Amsel criteria)

- Vaginal pH greater than 4.5
- Positive whiff test
- Milky discharge
- Presence of clue cells on microscopic examination of vaginal fluid

Risk factors

- Low socioeconomic status.
- Vaginal douching.
- Smoking.
- Use of an intrauterine contraceptive device.
- New/multiple sex partners, unprotected sexual intercourse, homosexual relationships.
- Frequent use of higher doses of spermicides.

Treatment:

- Oral and topical clindamycin and metronidazole (Flagyl, Metrogel) are equally effective.

e. Trichomoniasis

- It's a sexually transmitted infection

Causative organisms:

- Trichomonas vaginalis

Symptoms:

- Discharge : Green-yellow, frothy
- **Pain with sexual intercourse**, vaginal soreness, dysuria
- Signs of vaginal inflammation "strawberry cervix"
- Vestibular erythema may be present

Diagnosis:

- Motile Trichomonads seen microscopically.
- More leukocytes than epithelial cells.
- Positive whiff test.
- Vaginal pH greater than 5.4

Risk factors:

- Low socioeconomic status
- Multiple sex partners, lifetime frequency of sexual activity
- Other sexually transmitted infections
- Lack of barrier contraceptive use
- Illicit drug use
- Smoking

Treatment:

- Any nitroimidazole drug (e.g., metronidazole, Tinidazole)
- Sexual partners should be treated simultaneously

f. Vulvovaginal candidiasis

Symptoms:

- Discharge: White, thick, lack of odor
- Burning, dysuria, dyspareunia
- Pruritis
- Signs of vaginal inflammation, edema
- Vulval Excoriations

Diagnosis:

- Most patients can be diagnosed by microscopic examination
- Vaginal pH is usually normal (4.0 to 4.5)

Risk factors:

- Vaginal or systemic antibiotic use
- Diet high in refined sugars
- Uncontrolled diabetes mellitus

Treatment:

- Treated with one of many topical or oral antifungals, which appear to be equally effective (e.g. Clotrimazole cream, Miconazole)

g. Atrophic vaginitis

- Caused by estrogen deficiency

Symptoms:

- Itching, irritation, discharge (Yellow, greenish, lack of odor) Vaginal dryness, pain with sexual intercourse.
- Vagina mildly erythematous, easily traumatized.

- Vestibule thin and dry; labia majora lose their subcutaneous fat; labia minora irritated and friable

Risk factors:

- Menopause
- Conditions associated with estrogen deficiency, oophorectomy
- Radiation therapy
- Chemotherapy
- Immunologic disorders
- Premature ovarian failure
- Endocrine disorders
- Antiestrogen medication

Treatment:

- Both systemic and topical estrogen treatments are effective.

III. Health maintenance in women / screening

- During the health maintenance examination، the patient's medical، social، and family histories should be discussed.
- Comprehensive review of systems to find risk factors that will guide screening and counseling recommendations.

a. Family planning:

For patients who want to conceive:

- Age, medical history, family history, weight, nutrition, medications, immunization status, environmental exposures, STI risk, and substance use should be reviewed and appropriate counseling provided. Physicians may choose to counsel women on expectations of perimenopause and menopause, when relevant

For patients who want contraception:

- Premenopausal women should be asked about their reproductive plans. If the patient does not currently want to get pregnant, options for contraception should be reviewed

b. Coronary Heart Disease:

- Adults should receive targeted screening for coronary heart disease risk factors:

Overweight and obesity:

- All adults should be screened for elevated BMI
- Physicians are recommended to refer patients who are obese to intensive, multicomponent behavioral interventions

Hypertension:

- Screen for elevated blood pressure (greater than 140/90 mm Hg) in all adults 18 years and older.

Dyslipidemia:

- High levels of LDL cholesterol and low levels of HDL cholesterol
- Recommendations:
  - Women ≥45 y.o undergo screening with a total and HDL cholesterol every 5 years.
  - Cholesterol screening should begin at 20 years in patients with a history of multiple cardiovascular risk factors: diabetes, or family history of either elevated cholesterol levels or premature cardiovascular disease.

Type 2 diabetes:

- Screening tests include Hg-A1C level, fasting plasma glucose level, and two-hour 75-g oral glucose tolerance test.
- Screening criteria:
  - All adults beginning at 45 years of age
  - Adults with BMI ≥ 25 kg/m2 (overweight) + one of the following risk factors: Physical inactivity - 1st degree relative with DMT2 – HTN – HDL < 35 mg/dL or TAG > 150 mg/dL - Polycystic ovarian syndrome

Stroke prevention:

- Women age from 55 to 79 years take approximately 75 mg of aspirin per day.

c. Cancers:

	Breast	*Cervical*	*Colorectal*
High risk group	• Age ≥45 • Family/previous Hx of breast, ovarian cancer – genetic factors • Previous chest radiation • Low number pregnancies – birth control • Early age of menarche and late menopause • Using HRT	• Sexually active young female • Early onset of sexual activity • History of STI / HIV • OCPs • Low socioeconomic status • Multiple sexual partners, • A high-risk sexual partner • Smoking	Age: above 45-50 Race: African Gender: male Families with hereditary colon cancer syndromes Hx of adenomatous polyps, IBDs, Acromegaly Renal transplantation Abdominal radiations
Tests used	Mammogram	Pap smear	FOBT/colonoscopy
How to screen	Start screening at 40, and repeat annually	1. Age 21-29 years: - Do cytology alone every 3 years 2. Age 30-65 years: - Same like before OR add HPV test and repeat it after 5 years	FOBT: fecal occult blood test, do it annually Colonoscopy: (usually diagnostic) do it every 10 years

d. Sexually transmitted infection

- High risk group: Sexually active adults, those with multiple partners, those who have an STI or have had one within the past year, and those in a non-monogamous relationship living in an area with a high rate of STIs.
- Causative organisms: chlamydia, gonorrhea, syphilis, HIV
- Criteria of screening:

› All sexually active women 24 years and younger should be screened annually for chlamydia.

› High-risk women should be screened at least annually for chlamydia, gonorrhea, and syphilis.

› All adolescents should be screened and adults through 65 years of age for HIV.

e. Osteoporosis

- Test used: DEXA scan
- Criteria of screening: *(every 2 years)*

› All women above 65 y.o

› Women younger than 65 y.o with one or more risk factor of osteoporosis (check the list below)

› Postmenopausal women with fracture

Risk factors of osteoporosis:

previous fracture, family history of osteoporosis, white race, dementia, poor nutrition, smoking, low weight and body mass index, estrogen deficiency, early menopause (younger than 45 years), prolonged premenopausal amenorrhea (more than one year), long-term low calcium intake, alcoholism, impaired eyesight despite adequate correction, history of falls, inadequate physical activity

Questions

1) A 44 year old patient complains of secondary amenorrhea. Your initial investigation would be

   a. Serum FSH and LH
   b. Progesterone Challenge Test
   c. Serum pregnancy test (HCG)
   d. Serum Thyroxine, TSH, Prolactin

2) Which of the following is considered first-line therapy for primary dysmenorrhea?

   a. Nonsteroidal anti-inflammatories (NSAIDs)
   b. Selective serotonin receptor inhibitors (SSRIs)
   c. Antiestrogens
   d. Acupuncture
   e. Tricyclic antidepressant

3) A 43 years old lady complains of a grayish vaginal discharge with a fishy like odor. PH is >4.5 with a positive whiff test. She is not on any medications.
   What is your management?

   a. Clindamycin
   b. Tinidazole
   c. Miconazole
   d. Observation and follow up

4) A 65 years old woman complains of vaginal dryness, dyspareunia and itching. Vaginal wet-mount preparation was done which was free of infectious organisms. She is not on hormone replacement therapy or any other medication.
What is the most appropriate diagnosis?

a. Bacterial vaginosis
b. Trichomoniasis
c. Atrophic vaginitis
d. Vulvovaginal candidiasis

5) Fatima is 22 years married lady, came to the clinic complaining of persistent cough. Her BMI >40, with family history of diabetes mellitus.
What would you screen her for?

Diabetes, dyslipidemia, cervical cancer, hypertension

Answers:

1st Question: C

2nd Question: A

3rd Question: A

4th Question: C