

N305 Focus Sheet 1-Spring 2019

Ricci, Kyle & Carman Ch (3) 4,5, 10, 11, & 12

ATI Ch 1-6 & 8

**R,K, & C Ch 3—While this Chapter is technically not on the Exam, you must know these topics as the basis for other processes about which you will learn.**

**1. Provide a brief description of the external female reproductive organs.**

- a. Mons pubis is the rounded mass of the fatty tissue lying in the joint of the pubic bones, are also called the mons veneris.
- b. Labia majora are the two prominent longitudinal cutaneous folds that extend downward and backward from the mons pubis to the perineum.
- c. Labia minora is the major external visible portion of the vulva. The labia minora protects the vagina and the urethra.
- d. Clitoris is a small sensitive part of the female genitals at the anterior end of the vulva. It is also known as the pleasure center.
- e. Perineum is the area between the anus and the scrotum or vulva. It plays an important role in the function of GI system, intercourse, and childbirth.

**2. Provide a brief description of the internal reproductive organs.**

- a. Ovary is an organ found in the female reproductive system that produces an ovum. When it is released and travels to the fallopian tube into the uterus. Where a sperm fertilizes it. There are two eggs or ovaries found on each side of the body.
- b. Fallopian tube, oviduct, or uterine tube are long narrow ducts located in females abdominal cavity that transport male sperm cells to the egg. There tubes are a suitable environment for fertilization.
- c. Uterus is a hollow muscular organ located in the female pelvis between the bladder and the rectum. The ovaries produce the eggs that travel through the fallopian tubes. Once the egg has left the ovary it can be fertilized and implant itself in the lining of the uterus. Another function would be nurturing the fertilized ovum that develops into the fetus and holding it till the baby is mature enough for birth.

- c. Fundus of uterus is the top portion, opposite of the cervix. The top of the pubic bone to the cervix measures the fundal height and it is measured multiple times throughout pregnancy to determine growth.
- e. Cervix is a narrow passage from the lower end of the uterus. The function is to allow flow of menstrual blood from the uterus into the vagina, and direct the sperms into the uterus during intercourse.
- f. Vagina is an elastic, muscular canal with a soft; flexible lining that provides lubrication and sensation. It connects the uterus to the outside world. It receives the penis during intercourse and serves as a conduct for menstrual flow.

### 3. Menstrual Cycle hormones

| Hormone               | Purpose   |
|-----------------------|---|
| <b>Estrogen</b>       | Estrogen produces an environment suitable for the fertilization, implantation, and nutrition of an early embryo. It also causes the uterus to increase in size and weight.                                    |
| <b>Progesterone</b>   | Progesterone or the “hormone of pregnancy” reduces uterine contractions on the uterus. It also increases levels just before ovulation and peaks 5-7 days after ovulation.                                     |
| <b>Prostaglandins</b> | Prostaglandins are the primary mediators of the body's inflammatory process and are essential for physiological functions of the female reproductive system. They free the ovum inside the graafian follicle. |

R,K & C Ch 4; ATI Ch 1,2

#### 1. Define infertility. How can you as the nurse educate a couple on infertility causes and treatments?

Infertility is defined as an inability to conceive despite engaging in unprotected sexual intercourse for a prolonged period of time or at least 12 months. As a nurse you can educate a couple on some causes of infertility being substance use, sexual history, and medical history (etc). Some treatments are IVF(In Vitro Fertilization), intrauterine insemination, donor oocyte, surrogate mother (etc.).

#### 2. What is IVF?

IVF is the process of fertilization by extracting eggs, retrieving a sperm sample, and then manually combining an egg and sperm in a lab. The embryo is then re-inserted back into the uterus to continue the process of pregnancy.

#### 4. Birth Control options

| Type                                 | action   | Side effect                     | Pro/con   | Contraindications                                      | Important Patient Teaching   |
|--------------------------------------|--|---------------------------------|---|--|--|
| <b>Coitus interruptus</b>            | “pulling out”<br>Withdrawal method   | Leaking fluids in to the vagina | Pro: effective if only option<br>Con: one of the least effective methods, no protection from STIs | Pregnancy  | Beware of leaking from the penis                                     |
| <b>Lactational amenorrhea method</b> | When a woman breastfeeds, the infant stimulates the nipple by the infant's suckling sends nerve impulses to the mother's hypothalamus, which responds by | No side effects                 | Pro: No cost<br>Con: Temporary effects; effective for only 6 months after giving birth            | Loss of nutrients essential for growth and development | Mother must feed baby on demand for first 6 months and once at night |

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|   | changing the production of the pituitary hormones                               |   |   |  |  |
| <b>Condom</b>   | Sheath placed over penis blocking sperm   | 15 % failure rate; not a permanent method | Pro: Low cost, widely available and for the most part safe<br>Con: decreased sensation, breakage risk                   | Latex allergy & could break leading to pregnancy                         | Couples must to educated on proper use   |
| <b>Diaphragm</b>  | Cup mechanism to hold in a female's vagina                                      | 16 % risk of failure                      | Pro: no hormone usage, medically safe, protection against cervical cancer<br>Con: Increase UT's, professional placement | Toxic shock, Allergy to latex, & may become dislodged                    | Women must be taught to insert and remove correctly                                    |
| <b>Oral contraceptives (combination &amp; progestin only)</b> | Combines estrogen & progestin, thicken cervical mucus to prevent sperm entering | 8% failure rate                           | Pro: easy to use, protection against ovarian cancer, & women can use with history of thrombophlebitis                   | Bleeding Risk, Nausea, weight gain, heart attacks, strokes, mood changes | Women must be assessed for smoking history & screened for ovarian cysts and hyperlipid |

|  |  |  |   |   |  |
|--|--|--|---|---|--|
|  |  |  | Con: irregular bleeding, less effective than combination pill, & high cost for women  |   | emia prior to prescription   |
| <b>Natural Family Planning (Fertility Awareness-based methods)</b> | Refrain from sex during fertile period   | No side effects  | Pro: Natural & free, easy to hide<br>Con: Self control & calculating your periods perfectly                                       | Does not protect against STIs                       | High level of couple commitment  |
| <b>Intrauterine devices (IUDs)</b>                                 | T-shaped device that is inserted into the uterus that releases copper, or progesterone | Lighter or short periods, irregular bleeding for severe months | Pro: highly effective & used during lactation<br>Con: inserting requires skilled professional & increase risk of pelvic infection | Cramps, bleeding, pelvic inflammation & infertility | Find location of string to check for placement each month                    |
| <b>Methoxyprogesterone</b>   | Injection used as a hormonal medication of the progestin type                          | Spotting, vaginal itching, & Breast tenderness or discharge    | Pro: Does not provide daily action, does not require interruption of intercourse<br>Con: bone                                     | Abnormal Genital bleeding, & Active DVT or PE       | Patients need education on injectable sites and when to take the medication. |

|                          |  |   |  |        |   |
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|                          |  |   | pain, mood/mental change & change in sexual interest   |        |   |
| <b>Subdermal implant</b> | A time release implant of levonorgestrel for 3 years | Nausea, stomach, cramping/bloating, vaginal discharge | Pro: long duration of action & low dose of hormone<br>Con: irregular bleeding, weight gain & headaches | Anemia | Assess and education women that this method will take 3 years and during that time they will be infertile |

**5. What does PAINS stand for?**

PAINS stands for Period irregular, Abdominal pain, Infection, Not feeling well, and String missing.

**6. Name the three forms of sterilization and provide a description for each.**

Bilateral tubal ligation which is a surgical procedure where the fallopian tubes are burned or blocked to prevent fertilization.

Vasectomy is a surgical procedure consisting of ligation and severance of the vas deferens.

Hysterectomy which is a surgical procedure where the uterus and cervix is removed and the ovaries are left if possible.

**7. Discuss the differences between surgical and medical abortion.**

A surgical abortion is a procedure done with a local anesthesia that can be done in 2 types of ways such as a vacuum aspiration or dilation, and evacuation but the method is selected based on the gestational age. However, the medical abortion is done with administering an oral or vaginal medication but it could take 2-4 office visits to complete.

## Infections

RKC Ch 5 & Ch 20 pp 760 -771 ; ATI Ch 8

**1. What are the TORCH infections which negatively affect a woman who is pregnant?**

The TORCH infections are Toxoplasmosis, Other (syphilis, varicella-zoster, parvovirus B19), Rubella, Cytomegalovirus (CMV), and Herpes infections.

**2. What is the treatment for Chlamydia?**

Antibiotics are used to treat Chlamydia such as 1gm PO azithromycin and doxycycline 100mg PO BID for 7 days.

**3. What is the treatment for Gonorrhea?**

Antibiotics: the CDC recommends a single dose of 250 milligrams of intramuscular ceftriaxone and 1 gram of oral azithromycin.

**4. Which pregnant women should be screened for Syphilis? All women should be screened.**

**When should they be screened?**

Early in the pregnancy is when they should be screened. Additional screening dates should be every 6, 12, and 24 months into the pregnancy.

**What are the names of the tests used for screening?**

The names of the tests used for screening Syphilis are venereal disease research laboratory (VDRL) test, rapid plasma reagin (RPR) test, and Rapid immunochromatographic test.

**5. Why are pregnant women at higher risk for Candidiasis infection?**

Hormonal changes cause and increase in levels of estrogen that disrupts the normal pH of the vagina, which could lead to an overgrowth of yeast.

**6. Which pregnant women should be screened for Syphilis?**

All pregnant women should be screened for Syphilis.

**7. If a pregnant woman is diagnosed with an HIV infection, what treatment would you anticipate for the mother and the infant?**

Both Mother and infant will receive HBIG (Hep-B-Gammagee) vaccination. The infant will receive the vaccine within 12 hours of birth and the mother will receive it at the point of diagnosis of HIV.

**8. Why are genital herpes a problem for a pregnant woman? What is the treatment?**

The herpes can be transferred from mother to baby upon contact. Treatments included Valtrex at 37 weeks to suppress episodes and Acyclovir.

**9. Discuss each of the following for cytomegalovirus:**

|                                |   |
|--------------------------------|---|
| <b>Pathophysiology</b>         | CMV is a lytic virus that causes a cytopathic effect in vitro and in vivo. On a scope the cells are seen to have "owl's eye".         |
| <b>Nursing Assessment</b>      | Nursing assessment concludes hearing and vision exams, pain assessment, vitals, AST & ALT labs.                                       |
| <b>Testing</b>                 | A DNA test by urine or saliva culture is obtained three weeks after birth.  |
| <b>Management</b>              | Hearing and vision exams are good tools for early management of CMV.  |
| <b>Patient education needs</b> | Good hand hygiene and good hygiene practices such as washing hands frequently, not sharing towels, clean toys, and practice safe sex. |

**10. Discuss each of the following for Group B streptococcus:**

|                           |  |
|---------------------------|--|
| <b>Pathophysiology</b>    | GBS or Group B streptococcus is associated with sepsis, meningitis and common cause of pneumonia in newborns.  |
| <b>Nursing Assessment</b> | View the history of the patient, previous infections, monitor vitals, watch for UTIs, uterine infections, and chorioamnionitis.  |
| <b>Testing</b>            | Screening for GBS should be done at 35 to 37 weeks gestation. Vaginal and rectal cultures are taken.   |
| <b>Management</b>         | Make sure women are screen for GBS at 35 to 37 weeks. Educate and advocate for mothers who are positive of GBS by making sure antibiotics are present at birth ready to give to infants. |

|                                |   |
|--------------------------------|---|
| <b>Patient education needs</b> | Educate mother on screening and avoidate for GBS antibiotics at labor and delivery bedside table. |
|--------------------------------|---|

**11. Discuss each of the following for Hepatitis B: p198**

|                                |  |
|--------------------------------|--|
| <b>Pathophysiology</b>         | Hepatitis B is a viral infection that can be transmitted through blood, slavia, menstrual blood, and vaginal secretions. |
| <b>Nursing Assessment</b>      | Assess for infection, liver toxicity, skin breakdown, fatigue, vitals, and spread of transmission.                       |
| <b>Testing</b>                 | Watch and review blood tests every six months or annually.   |
| <b>Management</b>              | Hepatitis B is preventable through immunizations and is not a chronic infection.   |
| <b>Patient education needs</b> | Nurses should educate patient on getting screened and annual pap smears.   |

**R,K,& C Ch 10**

**1. Briefly define the difference between preembryonic, embryonic, and fetal stages of development.**

The preembryonic stage is also known as “conception” beginning fertilization which is the union of the ovum and sperm. The embryonic state is different from the preembryonic stage because it started 15 days and continues to week 8 after the preembryonic state and it is where all basic structures of major organs develop and main external features are done. The fetal stage is the longest period of prenatal development and during this time the basic structures from the embryonic stage will grow dramatically and become more refined.

**2. List 5 functions of the placenta. See RKC Chapter 10 pp342-3**

1. Provides nutrients from the mother to the developing fetus.
2. Induce the mother to bring more food to the fetus.
3. Remove waste products from the fetus.
4. Near birth, produces hormones that ready the fetus organs for life outside the uterus.
5. Protects the fetus from immune attacks by the mother.

**R,K,& C Ch 11; ATI Ch 3, 4, 5**

**1. What are:**

**Braxton hicks contractions** are false labor contractions that are painless, irregular, and usually relieved by walking.

**Hegars sign** is softening and compressibility of the lower uterus.

**Goodells sign** is softening of the cervical tip.

**Chadwick's sign** deepens the violet-bluish color of cervix and vaginal mucosa.

**Ballotment** is a rebound of unengaged fetus.

**2. What is hCG? Why is it so important to watch during pregnancy?**

hCG is a hormone that preserves the corpus luteum and its progesterone production so that the endometrial lining of the uterus is maintained. This is important to watch during the pregnancy because the endometrial lining needs to be maintained during a period of the pregnancy.

**3. What causes supine hypotensive syndrome in a pregnant woman? How can we educate her to prevent this?**

This is caused by compression of the vena cava when the pregnant woman is in the last trimester and lays in a supine position because the heavy gravid uterus will fall back against the inferior vena cava. We can educate pregnant women to lay on her side rather than her back.

**4. In your own words, BRIEFLY summarize the expected changes a woman will see in each of the following:**

**Uterus-** The uterus will increase in size, weight, and fibrous connective tissue. There will also be cervical softening and mucus plug.

**Cervix-** The cervix's main function is to keep the fetus in the uterus.

**Vagina-** The vagina has estrogen influences, hypertrophy, hyperplasia of lining, and increase thick white secretions

**Ovaries-** Both ovaries enlarge and the corpus luteum secretes estrogen, progesterone, and relaxin. Then relaxin, a protein, will soften the cervix for delivery and ovulation is stopped during pregnancy.

**Breasts-** The breasts will increase in size, heaviness, tingling, fullness, darkening of nipples, thin watery secretions.

**Gastrointestinal system-** this system will have pregnancy Gingivitis, increase saliva, gastric acidity, nausea and vomiting, decrease tone and motility of smooth muscles, hemorrhoids and constipation, and emptying of the gallbladder.

**Cardiovascular system-** This system will increase blood volume, heart rate, and cardiac palpitations. It will also enlarge the heart, have murmurs and pseudoanemia.

**Respiratory system-** this system will increase Tidal volume, increase oxygen, elevate diaphragm, nasal stuffiness, and epistaxis.

**Renal/urinary system-musculoskeletal system-** the Renal/ urinary system will be frequently, decrease bladder tone, decrease Renal, threshold for sugar, increase Glomerular filtration, decrease BUN, Creatinine, and Uric Acid. Musculoskeletal system will increase the lumbosacral curve, altered center of gravity, and duck waddling gait.

**Integumentary system-**This system will increase skin pigmentation, facial mask, Acne Vulgaris, dermatitis, vascular spider Nevi, and ABD (stretch marks Linea Nigra).

**Vascular related changes-** This change appears in the skin and most times in the legs which is called varicose veins.

### **Endocrine system**

**Thyroid-** The thyroid will increase size & activity, Increase metabolic rate, increase parathyroid Activity.

**Pituitary-** Pituitary gland will naturally enlarge gradually during pregnancy because of estrogen-stimulated prolactin cells.

**Pancreas-** Increases in the pancreas size and vascularization, beta cell mass expansion will increase, and insulin synthesis is increased as well.

**Adrenal glands-** During pregnancy the adrenal glands increase aldosterone. Allowing progesterone to waste salt by elimination of the urine.

**Prostaglandin secretion-** Prostaglandin secretions cause vasodilation of smooth muscles causing blood pressure to lower.

**Placental secretion-** The placenta secretions include hormones like prolactin and growth hormone, steroid hormones and neuroactive hormones. The placenta is in charge of the nutrients of the fetus during gestation.

**Immune system-** Immune system has involution of thymus, hyperplasia of uterine lymph nodes, and suppression of immune state.

## **5. Why are pregnant women often diagnosed with anemia?**

Women are more proven to be diagnosed with anemia because there is a higher number of blood in the body in which it provides nutrients for the baby. The concern with anemia in mothers is that it can lead to low birth weight, premature birth, and maternal mortality.

**6. What important roles do each of the following placental hormones play in pregnancy?**

**hCG-** preserves the corpus luteum and its progesterone production so that the endometrial lining of the uterus is maintained.

**hPL-**modulates fetal and maternal metabolism, participates in the development of maternal breasts for lactation, and decreases maternal insulin sensitivity to increase its availability for fetal nutrition.

**Relaxin-** acts synergistically with progesterone to maintain pregnancy, causes relaxation of the pelvic ligaments, softens the cervix in preparation for birth.

**Progesterone-** maintains the endometrium, decreases the contractility of the uterus, stimulates maternal metabolism and breast development, provides nourishment for the early conceptus.

**Estrogen-** causes enlargement of a woman's breasts, uterus, and external genitalia; stimulates myometrial contractility.

**7. Why are folic acid, iron and prenatal vitamins important for pregnant women?**

Prenatal vitamins like folic acid and Iron are important to the developing fetus and the prevention of anemia, iron deficiency, and serious abnormalities like brain and spinal cord deformities.

**What are some good sources for folic acid and iron that you can educate pregnant women to consume?**

Pregnant women should intake folic acid and iron by means of leafy vegetables, dried peas and beans, seeds, and orange juice. Bread, cereals, and other grains are good sources too. Iron fortified foods sources can include beef liver, red meats, fish, and poultry.

**8. After reading over the general guidelines on p 378 and the MyPlate guidelines on p 379, please write out a daily food plan in the table below:**

| <b>Breakfast</b>            | <b>snack</b>               | <b>Lunch</b>                      | <b>snack</b>   | <b>Supper</b>                | <b>snack</b>                                     |
|-----------------------------|----------------------------|-----------------------------------|--|------------------------------|--|
| <b>Scrambled eggs (4oz)</b> | <b>Crackers (3 pieces)</b> | <b>Lemon pepper Tilapia (3oz)</b> | <b>Whole wheat toast ( 2 slices)<br/>Peanut butter ( 1.5 oz)<br/>Jelly ( 1 oz)</b> | <b>Grilled Chicken (4oz)</b> | <b>3 graham crackers<br/><br/>Nutella (2 oz)</b> |
| <b>Whole wheat</b>          | <b>Cheese</b>              | <b>Roasted</b>                    | <b>Carrots (½</b>  | <b>Carrots</b>               | <b>16 fl oz</b>                                  |

|                                |               |                                  |                         |                            |                       |
|--------------------------------|---------------|----------------------------------|-------------------------|----------------------------|-----------------------|
| toast dry ( 1 piece)           | string (1)    | zucchini and Summer squash (½ c) | c)<br>Celery (½ c)      | (½ c)<br>Green Beans (½ c) | water                 |
| Blueberry Yogurt Parfait (1 c) | Apple         | Sliced Apples (½ c)              | Ranch dressing (2 oz)   |                            | Apple Juice (8 fl oz) |
| Orange Juice 8 fl oz           | 8 fl oz water | 16 fl oz water                   | Strawberry yogurt (1 c) | Almond Milk (8 fl oz)      | Kettle chips ( 2 c)   |
|                                |               |                                  | 16 oz fl oz water       |                            |                       |

**9. What would you tell a pregnant woman who asks you what she should avoid eating during her pregnancy? What if she asks how much weight she should gain?**

She should not consume any alcoholic beverages and avoid hydrogenated or partially hydrogenated fats. A woman of normal weight should expect a weight gain of 25-35 pounds.

**10. What is pica? What often precedes the identification of pica?**

Pica is a crave for nonfood substances such as dirt or red clay.

**11. In your own words explain what each of the following mean in reference to a pregnant woman.**

**Ambivalence**-having mixed feelings of contradictory ideas

**Introversion**-Concern with one's thoughts and feelings instead of external things.

**Acceptance**- action of consenting to receive or undertake something offered

**Mood swings**-Mood swings are extreme or rapid change mood in the individual person. Mood swings are typically associated with bipolar disorder.

**12. How can pregnancy change the mother's image of herself? Her sexuality? Her relationship with her partner?**

The mother's image of herself can vary greatly from person to person. She can feel beautiful or uncomfortable and overweight but the change in body image is normal but stressful and it's important to have a conversation with the pregnant women early on.

Her self image can affect her sexuality and the relationship with her partner. The partner may shrink away from the impending responsibility or feel like they finally found their place in the relationship with the pregnancy.

**R, K, & C CH 12; ATI Ch 4,5, & 6**

**1. Why is preconception care important?**

Preconception care is important because it improves the pregnancy outcomes and women's health. It allows healthcare professions to prevent diseases and management risks factors such as going to appointments, social risks, and biomedical markers that affect pregnancy outcomes and the health of future generations.

**2. What types of information should be obtained at the first prenatal appointment?**

At the first prenatal appointment there are tests that the mother will have to take such as urine, blood work, genetic carrier seeing, STD, PAP smear, and blood sugar. Also the nurse and provider need to be aware of length of pregnancy, method of delivery, birth weight of baby, type of anesthesia used if any, and infections of any kind as well as blood pressure problems.

**3. What are the thresholds for diagnosis of overt diabetes during pregnancy?**

The thresholds for diagnosis of overt diabetes during pregnancy is fasting :126, Hemoglobin: at least 6.5%, and random plasma glucose:200 mg.dL

**4. Calculate the following estimated due dates using Nagele's Rule:**

- a. Last menstrual period (LMP) 7/9/99 =5/16/00
- b. Last menstrual period (LMP) 12/24/96 = 10/31/97

**5. State what words GTPAL stand for and what each mean.**

- a. Gravida = # of times a women has been pregnant, this includes current pregnancy
- b. Term = # of pregnancies that have reached term
- c. Preterm = # of deliveries before term but after 20 weeks of gestation
- d. Abortion = # of pregnancies ended either spontaneously or induced prior to 20 weeks
- e. Living = # of living, live births

**6. So what is meant by the term para?**

The term Para means a woman who has produced one or more viable offspring carrying a pregnancy 20 weeks or more.

**7. What is linea nigra? How does fundal height correlate with gestation?**

Linea nigra is the dark line of pigmentation from the umbilicus extending to the pubic area. Fundal height correlates to gestation age by suggesting that

the higher the fundal the height the longer the pregnancy has been. Meaning that the weeks correlate to the fundal height.

|  |   |   |
|--|---|---|
| <b>8.</b>                                      | <b>Fill in the following table:</b>                                 |   |
| <b>Cervical smears (G/C and group B strep)</b> | tests.<br><br>Cervical smears are taken at 35 to 37 week gestation. | Cervical smears are taken at 35 to 37 week gestation.<br><br>Group B Strep is a swab at 35-37 week gestation, it is negative or positive.<br>If positive antibiotics are required in labor.<br>G/C swab looks for chlamydia & gonorrhea; Treatment is indicated positive. |

**9. How often are follow up visits and what things are assessed?**

Every 4 weeks up to 28 weeks, every 2 weeks from 29-36 weeks, and every week from 37 weeks to birth. Assess: weight, blood pressure, urine testing for protein, glucose, ketones, and nitrites, fundal height to assess fetal growth, assess for quickening/ fetal movement to determine fetal well-being, and fetal heart rate (should be 110-160).

**10. What danger signs are associated with the first trimester?**

Spotting or bleeding, painful urination, severe persistent vomiting, and lower abdominal pain with dizziness and accompanied by shoulder pain.

**Second?** Regular uterine contractions, pain in calf, sudden gush or leakage of fluid from vagina, and absence of fetal movement for more than 12 hours.

**Third?** Sudden weight gain, periorbital or facial edema, severe upper abdominal pain, or headache with visual changes, and decrease in fetal daily movements for more than 24hrs.

**11. How is fetal well being assessed?**

Fetal well being assessment consist of: Ultrasonography, Doppler flow studies, Alpha-fetoprotein analysis (MSAFP), marker screening tests, Nuchal translucency screening, amniocentesis, CVS, PUBS, Non-stress test, Contraction stress test, Biophysical profile. The biophysical profile would include breathing, Movement, muscle tone, heart rate, and amniotic.

**12. Discuss the following amniotic fluid findings and their implications to the fetus.**

**a. Color-** Normal amniotic fluid is clear or yellow. If brown then the baby has passed first bowel movement in the womb.

**b. Bilirubin-** In an uncomplicated pregnancy, bilirubin in amniotic fluid peaks at 19–22 weeks of gestation at concentrations of 1.6–1.8 mg/L. the present of increased bilirubin concentrations is unclear.

**c. Meconium-** It is a thick, green, tar-like substance that lines your baby's intestines during pregnancy. Typically it does not pass through the body until birth, but if the baby does pass a bowel movement then it comes up through the baby's lungs.

**d. Lecithin to sphingomyelin ratio (L/S ratio)-** The L/S ratio is to test the fetal amniotic fluid for fetal lung immaturity. The normal ratio is 2.0-2.5 which indicates the fetal lungs are mature.

**e. Alpha-fetoprotein-** A protein produced early by the fetal yolk sac and then later in the liver and gastrointestinal tract. When the alpha-

fetoprotein is high it indicates the developing baby has a neural tube defect such as spina bifida or anencephaly.

**f. Bacteria-** Refers to a bacteria infection that occurs before or during labor. The membrane surrounding the baby is infected with bacteria.

**g. Acetylcholinesterase** and amniotic fluid together indicate a similar finding of fetal intrauterine death and neural tube defects.

**13. Describe the procedure and expected results for a non stress test and biophysical profile (BPP).**

A nonstress test is an indirect measurement of uteroplacental function and has no known side effects. The expected results in an acceleration of fetal heart rate with movements. Biophysical is done with an ultrasound and can be done with a NST monitors fetal movements, breathing, amniotic fluid and tone. The expected results are a score of 10 with 2 points per category including NST.

**14. Choose one of the ten discomforts of pregnancy listed on p 420. Write out a teaching plan that you could use for a mother who is experiencing this discomfort. (While you are only choosing one to write about you will be responsible for knowing education for each of the discomforts.)**

**a. Leg Cramps**

- Elevate legs above heart level frequently throughout the day
- If you get a cramp, straighten both legs and flex your feet toward your body.
- Ask your healthcare provider about taking additional calcium supplements , which may reduce leg spasms.

**15. What are the common discomforts experienced in the third trimester?**

Shortness of breath, heartburn and indigestion, dependent edema, and braxton hicks contractions.

**How can you as the nurse educate women to successfully handle these discomforts?**

By providing anticipatory guidance and teaching to foster the woman's responsibility for self care, helping clarify misconceptions, and correct any misinformation.

**16. Should pregnant women receive vaccines, if so, which ones & why?**

There's no evidence that exists that there is a risk from vaccines for pregnant women with inactivated viruses or bacterial vaccines or toxoids. The theoretical risk has to be weighted against the risk of mother and fetus.

**17. Do not spend time on looking at the information on drug classifications, we will discuss this in class.**

**18. Briefly explain in your own words the value of prenatal/childbirth education classes.**

Prenatal/childbirth education is valuable because it offers more control on the pregnancy to the mother and possibly partner if they participate when they can. The woman should know her options, risks, and be prepared for the changes to come to promote the health of mother and fetus.