Case Study # 3

WOMEN'S CASE STUDY

Use the following template to complete your answers to this case study and resubmit via tigermail to Dr. Wilder ([wildebf@auburn.edu](mailto:wildebf@auburn.edu)) on or before the due date. Remember that you will lose 20% of your grade for every day it is late.

SCENARIO

Sue Lang is a 26-year old Caucasian female who presents today (10/10/14) for an annual pelvic exam. She is requesting a method of birth control. Sue has used oral contraceptives (OC) in the past and became pregnant while taking them. She does not particularly want to use OCs again.

TENTATIVE DIAGNOSES

Based on the information provided so far, listed are 2 potential diagnoses with rationale? Would you add any other diagnoses based on the information above?

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| --- | --- |
| Diagnosis | Rationale |
| Annual pelvic exam | Well exam. When reviewing this case, keep in mind that the gynecology well exam may be the only health maintenance visit for a well female. |
| Family planning | Sue wants to begin birth control. Based on her past experience with OCs she will need a presentation of various types of family planning. |
| Other | I would not add any other diagnoses at this time. |

HISTORY

1. List below are the significant questions and answers asked of Sue during this visit? Highlight significant findings. List any other questions you would like to include in her history.

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| --- | --- |
| Requested Data | Data Answer |
| Allergies | Sulfa |
| Current Medications | Carbamazine (Tegretol) 200 mg BID, 400 mg HS.  Ibuprofen (Advil) PRN for H/A.  Vitamins. |
| Childhood diseases /immunizations | Chicken pox. All childhood immunizations, last measles shot at 12 y/o. |
| Surgery | PE tubes, age 3.  Elective abortion, age 17. |
| Past medical history/  hospitalizations/fractures/  injuries/accidents | No transfusions. Hospitalized for vaginal birth 2004, 2007, 2010: MVA, concussion. Takes Tegretol for seizures that occurred as a result of the accident. Depression, 2006. Resolved with counseling and no medications. Gestational diabetes during pregnancies, controlled by diet. |
| Adult illness | 1999; MVA workup.  History of any STD’s? |
| OB/GYN history  OB/GYN history (cont.) | Menarche: Age 12, periods usually last 5-6 days, cycles of approx. 30 days, moderate flow, no cramping.  LNMP: 9/28/12 normal, skipped one cycle; anxious about contraception.  Last pelvic: 10/2011.  Mammogram: never.  GPA: G4P3A1.  Contraception: Uses condoms when they think it is necessary. No other contraception for 2 years. |
| Appetite | Small appetite, junk food. Decreased time to eat. |
| 24-hour diet recall | B: Coffee.  L: Mountain Dew, ham sandwich.  D: Fast food: Hamburger, fries, soda, 1 beer after. |
| Sleeping | 5 hours per night. Usually tired. |
| Sexuality | Relationship with husband strained. Husband does not mind the idea of another child. She is not interested in having another child. This has decreased her sexual interest.  Are they monogamous? |
| Social history | Smoking: Smokes about 2 ppd x 10 yrs.  Alcohol: Approximately 1beer/day (12 oz.)/6 pack/wk.  Recreational drugs: Rare marijuana use.  Exercise: Sporadic.  Social organizations: None |
| Family history | Mother: 49, perimenopausal, hormone therapy.  Father: 48, HTN.  Brother: 28, Good health, smokes.  Husband: 28, well.  Daughters: 8, 2, good health.  Son: 5, good health. |
| Work/finances | Both Sue and her husband are employed full-time as factory workers. Her husband works first shift at a book bindery. She works first shift at a gasket assembly. Her husband carries the insurance for the family, but no dental insurance. |
| Relationship with husband/children | Argues frequently with husband about money, children, household chores, and sexual habits. Having intercourse approx. 2x/wk. Good relationship with daughters. Frustrated by trying to meet their needs and work full time. |
| Relationship with family | Sue's mother and siblings live approximately 250 miles away. Parents divorced when she was very young. Does not see family except at holidays. Her husband's family is located nearby, and they see them approximately 2-3x/month. |
| Losses in life | Concerned about loss of free time and relationship with husband. Felt similar to this when started Tegretol several years ago. |
| What do you do when you are stressed? How do you manage stress? Medications for stress? | Sometimes, all I want to do is cry and I find myself yelling at the kids. My husband does not understand. Smoke, talk on phone, have a beer. Have never taken medications for stress. |
| Do you ever think about hurting yourself? | No. |
| Do you ever think about leaving your husband? | Yes, but have never gone any farther than thinking about it. |
| Where do you see yourself in 10 years? | Here, alone with my children |
| What are your thoughts on a birth control method? | I do not want to become pregnant. My husband does not seem to care. I don't want to use anything I may get pregnant on. I have heard good things about the shot and would consider that. |

2. Below is the ROS, highlight any abnormal findings. And any other symptoms you felt needed to be reviewed for this visit.

|  |  |
| --- | --- |
| SYSTEM REVIEWED | DATA ANSWER |
| General | Feels healthy but tired most of the time. |
| Abdomen | Denies problems with constipation, diarrhea, or heartburn. |
| Gynecology/GU | Denies abdominal pain or tenderness. Denies vaginal discharge, odor, or itching. Denies breast tenderness or discharge. Denies pain on intercourse. Also denies symptoms of UTI. |
| Endocrine | Denies dysphagia, urinary frequency, thirst, poor healing of skin lesions, loss of weight. |
| Neurological | Denies frequent H/A, seizures, confusion or other problems. |
| Other systems to be reviewed for this patient? | Respiratory because she is a smoker, Psych because she seems to be unhappy in her current situation |

PHYSICAL ASSEMENT

Below is the PE, highlight any significant findings and list any other assessment data you would like to include.

|  |  |  |
| --- | --- | --- |
| SYSTEM | FINDINGS | RATIONALE |
| Vital signs | B/P: 130/72, P: 78, R: 22, T: 982  Height and weight | To determine BMI |
| General appearance/skin | Appears thin and stated age. Skin pale, warm, and dry. Yellowing of skin around nail beds, unclean nails.  Jaundice, bruises, ulcerations, rash? Clubbing or cyanosis? | Can indicate problems with other body systems such as the liver or lungs/decrease oxygenation |
| HEENT | No thyromegaly.  Normocephalic, hair distribution, PERRLA, sclera, EOMS intact; TMs, oropharynx, mucous membranes, sinus tenderness, adenopathy, tenderness, bruits, JVD. | Abnormalities can indicate infections, malignancies, and fluid status. |
| Lungs | CTA. |  |
| Heart | S1S2 normal, no murmur. |  |
| Breasts | Soft, equal, no masses or nipple discharge. Bilateral fibrocystic changes. Does not do BSE.  Pain?  Dimpling?  Axillary or supraclavicular adenopathy? | Occasionally malignancies, hormonal changes  Malignancy  Malignancy is associated with firmness, increased quantity, adherence to each other and the chest wall |
| Abdomen | BS +, soft without masses, no LA, no HSM.  CVA tenderness? | Indicative of kidney infection |
| Pelvic | Uterus: small AV, normal size and shape.  Cervix: Parous, round, no lesions, no CMT.  Discharge: WNL.  Adnexa: Negative. Normal vulva, rectal deferred. |  |
| Neurological | Alert, moving frequently, poor eye contact. Screening neuro: strength/sensation intact, reflexes 2+. |  |
| Extremities | No edema. |  |
| Other assessment? | Psychiatric | She has poor eye contact and is depressed. Is she calm, cooperative, anxious, cooperative? |

DIFFERENTIAL DIAGNOSES

Identify the significant positive or negative data to support or refute each differential diagnoses.

|  |  |  |
| --- | --- | --- |
| DIAGNOSIS | POSITIVE DATA | NEGATIVE DATA |
| Family planning | She is a 26 year old female with 3 children who does not want to have more children. She has had an abortion in the past. Became pregnant on OCs in the past. Uses condoms when they think it is necessary, but no other contraception for 2 years. | She is a smoker and this is a contraindication with birth control use. Her husband is indifferent about another pregnancy. |
| Altered health maintenance | Poor eating habits, smokes, drinks alcohol, smokes marijuana, does not exercise regularly, appears thin and pale, yellowing of skin and nails, unclean nails. Her husband carries the insurance for the family, but no dental insurance. | No data refutes this diagnosis |
| Poor dietary habits | Small appetite, junk food, decreased time to eat, diet high in caffeine, fat, and sugar  B: Coffee.  L: Mountain Dew, ham sandwich.  D: Fast food: Hamburger, fries, soda, 1 beer after. | No data refutes this diagnosis |
| Altered family processes | Sue and her husband do not have a clear agreement on the decision to have another child, relationship with husband is strained. Argues frequently with husband about money, children, household chores, and sexual habits. Frustrated by trying to meet their needs and work full time. Sue's mother and siblings live approximately 250 miles away. Parents divorced when she was very young. Does not see family except at holidays. | Having intercourse approx. 2x/wk. Good relationship with daughters. Her husband's family is located nearby, and they see them approximately 2-3x/month. |
| Depression | Tired all the time, decreased sexual interest. Sometimes, all I want to do is cry and I find myself yelling at the kids. My husband does not understand. Concerned about loss of free time and relationship with husband. Poor eye contact. | Works full time and takes care of her responsibilities, has good relationship with her daughters, intercourse 2 x/wk., arguing with husband over things common in most all relationships. |
| Hypothyroid | Tired all the time, decreased sexual interest | Does not present with weight gain, cold intolerance, hypersomnia, muscle weakness or cramping, hair loss, swelling, constipation, nausea, memory deficits, irregular menses |
| Anemia | Tired all the time, appears thin and pale, poor dietary intake | No complaints of heavy bleeding |
| Other differential dxs?  Chronic Fatigue Syndrome | Tired all of the time | Does not c/o unrefreshing sleep, memory or concentration problems, muscle pain, joint pain without redness or swelling, headaches, swollen lymph nodes, or recurring sore throat |

DIAGNOSTIC TESTS

Below is a list of diagnostic tests obtained on Sue with the results. Provide a rationale for each – or – note if you think this was an unnecessary diagnostic test based on all you know about Sue.

|  |  |  |
| --- | --- | --- |
| DIAGNOSTIC TEST | RESULTS | RATIONALE |
| Pap smear | WNL pap. | This is her well exam. She is a 26 year old sexually active woman who wants to start a new birth control. |
| Pregnancy test | Negative. | She has used condoms occasionally as her only method for contraception for the past 2 years. |
| Beck Self-Report Depression Scale | WNL. | She seems weepy, frustrated, and unhappy in her relationship with her husband. |
| Electrolytes, LFT, renal function, cholesterol | Not done, only if >30-40 for baseline. | I agree that there was not a need for these tests. |
| H/H | Not done, no complaints of heavy bleeding. | She is tired but is can be contributed to her activity level, work, and home responsibilities. However, I would probably do an H/H because she could be anemic without the presence of heavy bleeding. |
| TSH | No problems with amenorrhea or excessive fatigue. | American Thyroid Association does not recommend baseline screening until 35 years old. She does not present with classic symptoms of hypothyroidism. She is tired and reports a decreased sexual interest but this could be because of her busy schedule. |
| Other diagnostic tests? | **None** | **None** |

DIAGNOSES

After review of your differential diagnoses, what final diagnoses are appropriate for Sue? (List all that apply).

1. Family Planning
2. Altered health maintenance
3. Poor dietary habits
4. Altered family processes.

THERAPEUTIC PLAN

1. What are the issues to consider when deciding on a contraceptive method for Sue?

Issues to consider include the safety of the method chosen, age of the patient, the health and medical conditions of the patient, ability to comply with method, frequency of sexual relations, risk of sexually transmitted infections, and cost. For Sue it is important to consider that she does not want any more children at this time and she became pregnant on oral contraception in the past. She takes Tegretol for seizures and smokes. She does have health insurance but her financial situation is strained.

2. Below are a variety of possible contraceptives to choose from? Please complete the chart for each product.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Type | Insurance Coverage | Failure Rate  Perfect Use – PU  Typical Use - TU | Tegretol Interaction | Office Use | Private | Approx. Cost/Yr |
| Cervical cap | Yes | PU – 9-26%  TU – 16-32% | None | No | No | $35 - $60 |
| Condom (Male & Female) | Only with a prescription | Male  PU – 2%  TU – 15%  Female  PU – 5%  TU – 21% | None | No | No | $150 |
| Diaphragm | Yes | PU – 6%  TU – 16% | None | No | No | $60 |
| DMPA  (Depo-Provera) | Yes | PU – 1%  TU – 3% | Tegtetol can decrease plasma concentrations and pharmacologic effects of medroxyprogesterone. | Yes | Yes | $220 - $460 |
| IUD | Yes | PU – 1%  TU – 1% | Tegretol will decrease the level or effect of hormone releasing IUDs by affecting hepatic/intestinal enzyme CYP3A4 metabolism.  IUDs that do not contain hormones do not result in an interaction | Yes | Yes | $100 |
| Implanon | Yes | PU – 1%  TU – 1% | Tegretol will decrease the level or effect of Implanon by affecting hepatic/intestinal enzyme CYP3A4 metabolism. | Yes | Yes | $150 - $180 |
| Norplant | Yes | PU – 1%  TU – 1% | Tegretol will decrease the level or effect of Implanon by affecting hepatic/intestinal enzyme CYP3A4 metabolism. | Yes | Yes | $95 -$115 |
| Birth Control Pills | Yes | PU – 1%  TU – 8% | Estrogen containing pills and some progestin will increase the level of Tegretol by affecting hepatic/intestinal enzyme CYP3A4 metabolism. The efficacy of hormonal contraceptives may be reduced. | No | Yes | $160 -$600 |
| Nuva Ring | Yes | PU – 1%  TU – 8% | Nuva Ring will increase the level of Tegretol by affecting hepatic/intestinal enzyme CYP3A4 metabolism. The efficacy of hormonal contraceptives may be reduced. | No | Yes | $160 -$600 |
| Essure Procedure | Yes | 1% | None | Yes | Yes | $200 |
| Contraceptive Patch (Ortho Evra) | Yes | PU – 1%  TU – 1% | Ethinylestradiol will increase the level of Tegretol by affecting hepatic/intestinal enzyme CYP3A4 metabolism. The efficacy of hormonal contraceptives may be reduced. | No | Yes | $160 -$600 |
| Other?  Tubal Ligation | Yes | 1% | None | No | Yes | $200 |
| Spermicide | Only with a prescription | PU – 18%  TU – 29% | None | No | No | $180 |
| Vaginal Sponge | Only with a prescription | PU – 9-20%  TU – 16-32% | None | No | No | $500 |

3. What are factors that should be considered when Sue decides on a contraceptive?

Factors that she should consider include ease of use, interactions with her current medications, side effects, cost, and efficacy.

4. Identify the birth control method you decide is best for Sue; provide rationale (pros and cons) for this selection; and list the specific side effects you need to discuss with Sue regarding this product?

IUD (Paragard) Copper T-380A

|  |  |
| --- | --- |
| Pros | Cons |
| Covered by insurance  99% effective  Inserted in office  Private  Inexpensive  10 year device  Not hormone releasing = safe with Tegretol  Do not have to remember to take pill, change patch, insert ring, etc.  Can be reversed / removed  Ideal for monogamous, parous women | Heavier menstrual cycles  Bleeding between periods  Cramping  Expulsion of the IUD  Increased risk of PID during 1st month |

Side Effects:

1. Paragard does not increase the risk of ectopic pregnancies, but if the patient becomes pregnant with the IUD in place it is more likely to be ectopic.
2. There is an increased risk of PID during the first 20 days after insertion.
3. Expulsion can occur during menses especially during the first few months. She should check to make sure she feels the string after menses.
4. Cramping and abnormal bleeding may occur but generally resolve after 6 months.
5. Other side effects that can occur include amenorrhea, acne, depression, weight gain, decreased libido, and headache.

5. When should Sue return for follow up?

Sue needs to return for a follow up after the next menses to address any concerns or adverse effects, ensure the absence of infection, and check the presence of the strings.

6. What recommendations can you make to Sue regarding her other diagnoses (list each diagnosis, recommendation, and appropriate education separately)?

1. Family Planning
2. Follow up after next menses to assess satisfaction and address any concerns with copper IUD.
3. Altered health maintenance
4. Education on smoking cessation
5. Smoking has been directly linked to cancer and heart disease
6. Education on cessation of alcohol and drug use
7. Drug and alcohol use can result in addiction which has both social and physical consequences
8. Education on personal hygiene
9. To decrease the risk of infection and promote maintenance and integrity of skin and teeth
10. Education on regular exercise
11. To promote overall health and well-being
12. Education on regular physical and dental check-ups
13. To identify and treat problems early
14. Encourage Sue to stay current on her immunizations
15. If not up to date she needs: Influenza, Td/Tdap, Varicella, HPV, MMR
16. Poor dietary habits
17. Encourage a diet high in intake of fruits, vegetables, nuts/legumes, low-fat dairy, and low intake of sugar-sweetened beverages, red meat, and sodium
18. Provide education on implementing MyPlate Recommendations which include: portion sizes of fruits and vegetables, protein, whole grains, dairy, limited sodium, and water
19. Altered family processes.
20. Recommend that Sue and her husband attend marriage counseling to improve their communication skills

# References

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