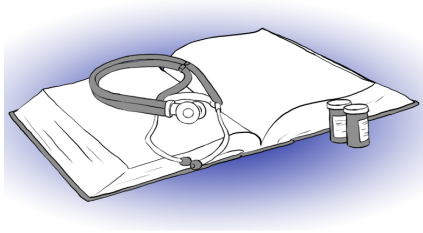


STUDENT NATIONAL PHARMACEUTICAL ASSOCIATION

CLINICAL SKILLS COMPETITION

National CSC 2014 DIVISION II

Renaissance Arlington Capital View Hotel
Arlington, VA

Instructions: Below is the official Division II case for the 2014 National Clinical Skills Competition. Complete the accompanied SOAP note with your evaluation and recommendations for drug therapy and patient education. Judges will only take into account information written in the ASSESSMENT and PLAN/EDUCATION sections of the SOAP note. Included in your work-up packet is a set of normal lab values. Use the provided scratch paper for any additional notes you would like to write down. This section will not be evaluated.

Name: LJ
MRN 718-201402
Date: 7/5/2014

CC: Patient has not been feeling well for the last couple of weeks.

HPI: LJ is a 33 year-old African American Female who first presented to the Emergency Department (ED) on 7/5/2014 (today). Patient had been experiencing episodes of vomiting in the morning since 6/25/2014 and this morning's episode of vomiting lasted longer and was more severe. She vomited for hours early this morning and has not been able to keep any food down. She also woke up with a severe headache and aches "all over". Since it was early in the morning, her Primary Care Physician (PCP)'s office was not open yet. LJ was very concerned and had no idea what could be wrong, so she decided to go to the ED.

The medical team appreciated diaphoresis and palor. After labs, the ED team appreciated both tachycardia and concerning blood pressure (BP: 190/130, HR: 125). In the ED, LJ received Vasotec 1.25 mg IV over 5 minutes, Morphine 5 mg IV, Phenergan 12.5 mg IV, and IV fluids initially. LJ remained in the ED for several hours and was transferred to the Women's Health Team for further lab work-up. Even though LJ began to feel better (she remained pale and weak from the past few weeks) as the day progressed the Women's Health Team decided to keep LJ overnight for observation until her lab results were available. The Women's Health Team also contacted her PCP for past labs and further medical history.

Labs and a number of tests were ordered to further direct patient therapy. Patient really wants to go home as soon as possible.

PMH:
- Dyslipidemia x 4 yrs
- Genital Herpes X 10 yrs, but has had more outbreaks recently
- Hypertension x 4 yrs
- Obesity (has been an issue for as long as she can remember)
- P1G1: birth-weight 9.3lbs
- Seasonal Allergies

SH:
- Tobacco: Smokes 1 ½ ppd x 10 yrs
- Alcohol: Occasionally drinks wine with dinner. Also, drinks alcoholic beverages during her monthly ladies night.
- Patient is single and sexually active

FH:
- Mother: hypertension, dyslipidemia, and had gestational diabetes; still alive
- Father: smoked and had heart attack at age 48; deceased at age 55
- Brother: deceased at age 28 due to gunshot wound to the abdomen

Allergies: Sulfa allergy (severe rash)

Home medications:
- Lisinopril 20 mg q day
- Atorvastatin 40 mg q day
- Ibuprofen 400 mg q4h prn headache/body aches
- Fexofenadine 60 mg BID

LJ states that she often doesn't take her medications, due to her hectic lifestyle which she has no extra time to be healthy

Inpatient Medications:

Vasotec 2.5 mg IV q6 hr (Start: 7/5 Stop: 7/6)
Morphine 5 mg IV q4 hr prn pain (Start: 7/5)
Phenergan 25 mg IV q4-6 hr prn (Start: 7/5)
NS IV Fluid (Start: 7/6)
Trandate IV Infusion (Start: 7/6)
Note: Reinitiate home meds when LJ can take meds PO. As of 7/7, patient is now able to keep food down.

Physical Exam (07/05/2014):

Vitals:	BP: 192/131, HR: 127, Temp: 37˚C, Wt: 230 lb., Ht: 5'4"
General:	Frustrated, younger woman who presented to us vomiting and appearing exhausted.
Skin:	Intact, dry, scaly skin
HEENT:	PERRLA; EOMI; TMs intact
ABD:	Distended, + bowel sounds
Genit/Rect:	Multiple blisters present
Neurology:	CN II-XII intact, no focal deficit
Ext:	Good capillary refill; pulses 4+

Laboratory Values:

7/5/14: (ED)

132	100	30	156
4.2	20	0.89	

7/6/14

134	101	26	158
4.3	21	0.87	

7/7/14

135	102	23	160
4.2	20	0.86	

	7/5/2014 (ED)	**7/6/2014**	**7/7/2014**
Ca	8.7 mg/dL	8.8 mg/dL	8.7 mg/dL
Phos	2.5 mg/dL	2.6 mg/dL	2.5 mg/dL
Mg	2 mg/dL	2.1 mg/dL	2 mg/dL
ALT	49 IU/L	49 IU/L	48 IU/L
AST	40 IU/L	40 IU/L	39 IU/L
Albumin	4 mg/dL	4.2 mg/dL	4.1 mg/dL
LDL	143 mg/dL	---	---

HDL	35 mg/dL	---	---
TG	195 mg/dL	---	---
HSV-2 Antibody	Positive	---	
hCG	---	89miu/mL	---
CD4 Count	---	750 cells/ μL	---
HIV Antibody	---	Negative	---
Heterophile Antibody	---	Negative	---
OGTT	---	---	1hr: 202 mg/dL 2hr: 162 mg/dL
Urine Protein	---	---	3 mg/dL

Vital Signs:

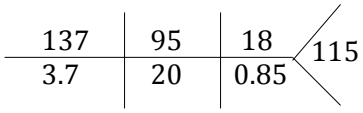
	7/5/2014 (ED)	**7/6/2014**	**7/7/2014**
BP	192/131	185/127	184/125
HR	127	118	117
Temp	37˚C	37.2˚C	37.1˚C
Wt	210lb	---	---
Ht	5'4"	---	---

CT scan-head: Unremarkable

Microbiology:

7/5/14:	**7/7/14:**
Blood culture: • Result: No growth Sputum culture: • Result: No growth Urine culture: • Result: No growth Influenza A and B PCR Assay • Result: Negative MRSA Screen • Result: Negative	Blood culture: • Result: No growth Sputum culture: • Result: No growth Urine culture: • Result: No growth

Laboratory Tests from PCP (1/5/2014):



	1/6/2014
Ca	8.9mg/dL
Phos	2.7 mg/dL
Mg	1.8 mg/dL
ALT	48 IU/L
AST	39 IU/L
Albumin	3.8 mg/dL
LDL	130 mg/dL
HDL	37 mg/dL
TG	180 mg/dL
A1C	6.2 %

PROBLEM LIST:

1. HTN (NOT preeclampsia)
2. Gestational Diabetes
3. Herpes
4. Dyslipidemia
5. Dehydration
6. Pregnancy Lifestyle Counseling
    1. EtOH and smoking cessation
    2. Education of teratogenic medications
    3. Nutrition
    4. Exercise
7. Health Maintenance
    1. Immunizations
    2. Smoking Cessation
    3. Use of Alcohol
    4. Safe Sex Practices
    5. Cancer Screening
8. Adherence
9. Allergies

Prob	**Assessment** (Disease and Drug therapy plus justification)	**Plan** (recommendation, rationale, monitoring, patient ed)
HTN	**Assessment:** Patient has uncontrolled hypertension as evidenced by: BP readings of 192/131, 185/127, and 184/125 mmHg. ACOG 2012 pregnancy guidelines state that antihypertensive therapy should be initiated with BP >150/100. Patient's lack of adherence could also be contributing to high blood pressure. **Goals for tx:** Reduce BP to 140/90 or 150/100 mmHg. 150/100 mmHg goal is based off of guidelines on National Clearinghouse for pregnant patients with uncomplicated HTN. ACOG 2012 guidelines: BP goal for pregnant women with chronic hypertension is between 120-160 mmHg systolic and 80- 105 mmHg diastolic. NICE: In women with gestational hypertension or preeclampsia, treatment is initiated at blood pressures ≥150/100 mmHg with the goal of systolic blood pressures <150 mmHg and diastolic blood pressures of 80 to 100 mmHg. ADA 2013: Pregnant women with diabetes and hypertension 110–129/65–79 mm Hg target goal but Lower blood pressure levels may be associated with impaired fetal growth. *All of the above BP goals can be accepted as long as teams cite where they found their specific goal from.* **Risk Factors/ Contributing factors:** Family history, obesity, smoking, adherence	**Stop:** Ibuprofen **Rational:** Is a category C in the 1st and 2nd trimester therefore during this time the drug should only be consumed if the potential benefit justifies the potential risk to the fetus. The 3rd trimester ibuprofen is a category D indicating positive evidence of human fetal risk. One study indicated NSAID use during the first 20 wks of pregnancy was associated with an 80% increased risk of miscarriage over nonuse. Also use of NSAIDs will decrease the antihypertensive drug's effects (which can contribute to the patients uncontrolled blood pressure). **Alternative analgesics agents:** **Tylenol:** Also a pregnancy category C (all trimesters) **Topical options:** Capsaicin category B, Methyl salicylate and menthol (ie Bengay, icy hot, Thera-Gesic etc): There are no adequate or well controlled studies in pregnant women. Use of the topical patch during the last 3 months of pregnancy is contraindicated by the manufacturer due to increased risk to the fetus and increased risk of complications during delivery. **Stop:** Lisinopril 20 mg **Start: Options for Urgent BP control:** • Labetalol 10-20 mg IV then 20-80 mg q 20-30 min to max dose of 300 mg OR constant infusion 1-2 mg/min IV (considered first line agent, tachycardia is less common and fewer adverse events) • Hydralazine 5 mg IV/IM then 5-10 mg IV q20-40 min or constant infusion 0.5-10 mg/hr (higher or frequent dosage associated with maternal hypotension, HA, and fetal distress) • Nifedipine 10-20 mg PO, repeat in 30 in 30 minutes if needed; then 10-20 mg q 2-6 hrs)

	Current medication tx: Inpatient Med: Trandate (Labetalol) IV infusion **Home Med:** Lisinopril 20 mg is not appropriate because it is a category D, and is also not controlling her current blood pressure	**Options for PO Antihypertensive Agents in Pregnancy:** • Labetalol 200-2,400 mg/d in 2-3 divided doses (well tolerated, potential bronchoconstrictive effects) • Nifedipine 30-120 mg/d orally of slow-release preparation (Do NOT use sublingual form) • Methyldopa 0.5-3 g/d PO in 2-3 divided doses (childhood safety data up to 7 yrs of age; may not be as effective in control of severe HTN • Thiazide Diuretics (second line agent, BUT AVOID USE B/C OF **SULFA** ALLERGY) • ***Information came from ACOG: HTN in Pregnancy Task Force*** **Rational:** Lisinopril is category D and treatment with ACE inhibitors and ARBs is contraindicated because they can cause fetal damage. Therefore, want to d/c this home med. Antihypetensive drugs known to be effective and safe in pregnancy include methyldopa, labetalol, diltiazem, clonidine, and prazosin per ADA 2013. BP goals vary depending upon guidelines used please refer to HTN Goals for treatment. **F/U and labs:** BP, HR, potassium, Sodium, ketonuria Patient's BP should be checked at every remaining prenatal appointment and reassessed after delivery to see if treatment is still warranted **Patient education:** Initiate TLC, low sodium diet
Gestational Diabetes	**Assessment:** Patient has untreated, newly diagnosed gestational DM as evidenced by increased OGTT 1h 202, 2hr>162 mg/dL. Therefore treatment is recommended at FBG: ≥92 mg/dL, 1-hr: ≥180 mg/dL or 2-hour: ≥153 mg/dL per ADA 2013 **Goals for tx:** Control BP, decrease s/sx of hypoglycemia and hyperglycemia, prevention of complications and hypoglycemia for mother and child, high birth weight, and premature delivery ADA and ACOG glucose targets are: • FBG ≤95-99 mg/dL • One-hour PPBG ≤140 mg/dL • OGTT ≤120-127 mg/dL **Risk Factors/ Contributing factors:** FH, obesity, previous pregnancy >9 lb baby **Current medication tx:** N/A	**Start:** Insulin NPH at 0.7 units/kg per day Insulin is typically started at a dosage of 0.6- 0.7 units/kg per (66-67 units) day given in divided doses. 2/3 of total dose (44 units) in am with remainder before dinner (22 units). The insulin regime should be modified for BMI, Glucose levels, and lifestyle. **Rational:** For women with GDM, common practice is to initiate insulin therapy when target glucose levels are exceeded despite nutritional therapy and exercise. However, ACOG recommends insulin therapy for women receiving medical nutritional therapy whose FBG >95 mg/dL, 1hr PPBG 130-140 mg/dL or OGTT 2hr >120. Insulin is the 1st line pharmacologic therapy for gestational diabetes. US FDA categorizes lispro and aspart as pregnancy class B. However, ACOG and ADA have yet to recommend their use. Long acting insulin (glargine and detemir) have little evidence to support use in pregnancy. Expert opinion recommends NPH due to the lack of RCT data. **Alternative agent:** Glyburide is a reasonable alternative for women who fail diet therapy and refuse to take, or are unable to comply with, insulin therapy. **Rational:** Insulin is preferred over conventional diabetes treatment such as metformin and sulfonylureas in gestational diabetes due to clinical efficacy and safety in clinical trials in pregnant women (ADA 2012 Guidelines)

		F/U and labs: Blood glucose: monitoring glucose upon awakening and one or two hours after each meal to guide medical management (Grade 2B), A1c at every prenatal office visit, OGTT test every 3 years postpartum (ADA 2013), monitor A1C at every visit to PCP **Patient education:** Educate patient on injection technique and storage, encourage healthy lifestyle, see and exercise (see pregnancy lifestyle recommendations). Also educate management of s/sx of hyper- and hypoglycemia
Genital Herpes	**Assessment:** Patient has untreated genital herpes. Patient's physical exam reports multiple blisters and she has a diagnosis of genital herpes with frequent outbreaks. Lab revealed positive for HSV-2 Antibody and blisters found upon exam. Patient is not currently on any treatment. **Goals for tx:** Treat current outbreak and prevent future outbreaks. Want to prevent active infection especially during the delivery of the baby per CDC to avoid cesarean delivery **Risk Factors/ Contributing factors:** Sexually active, history of herpes, present lesions **Current medication tx:** None	**Start:** Acyclovir 400 mg TID x5 days orally OR Valacyclovir 500 mg BID x 3 days, or 1 g QD x 5 days **Start Suppressive therapy at 36 weeks gestation til delivery:** Acyclovir 400 mg TID OR Valacyclovir 500 mg BID. Suppressive therapy reduces the frequency of symptomatic HSV recurrence at the onset of labor, and thus reduces the need for cesarean delivery **Rational:** Currently not on any treatment for genital herpes. Acyclovir is preferred over Valacyclovir (has fewer safety and efficacy data in pregnancy) in pregnancy. Either can be used, but there is more evidence with acyclovir. However, both are pregnancy category B, so caution should be used and therapy only used when necessary. Therapy should always be offered to patients with primary or first episode genital nonprimary infection, regardless of timing of occurrence during pregnancy. Most clinicians and pregnant women do not choose to treat because most recurrences are short-lived and they want to limit unnecessary exposure to antiviral medication. Suppressive therapy — The use of suppressive therapy from 36 weeks of gestation to delivery reduces the frequency of symptomatic HSV recurrence at the onset of labor, and thus reduces the need for cesarean delivery per ACOG **F/U and labs:** Monitor UA, BUN, SCr, liver enzymes, CBC **Patient education:** There is no cure for herpes, but medicines such as acyclovir/valacyclovir can be used to shorten or prevent outbreaks. Therapy is most effective if used within 24 hours of the first s/sx of an outbreak. Even though the infection can stay in your body for remainder of your life, the frequency of outbreaks may decrease over time. Herpes places you at risk for having a miscarriage or premature birth. **Safe sex practices**: abstinence during an active outbreak and any herpes lesions. Using a condom and letting her partners know that she does have the STD.

Dyslipidemia	**Assessment:** Pt has uncontrolled dyslipidemia as evidence by LDL: 143 mg/dL, HDL: 35 mg/dL and TGs: 195 mg/dL. **Goals for tx:** decrease complications, LDL < 160 mg/dL, HDL > 50 mg/dL, TG < 150 mg/dL, and TC < 200 mg/dL (per ATP III) **Risk Factors/ Contributing factors:** Obesity, DM, pregnancy, smoking **Current medication tx**: Atorvastatin 40mg is not appropriate due to its teratogenic effects.	**Stop:** Atorvastatin 40mg **Start:** Nothing OR bile acid sequestrant: Welchol 1875 mg orally twice daily or 3750 mg orally once daily **Rational**: NCEP 2001 ATP III guidelines recommend bile acid sequestrants in women requiring lipid management and desiring to bear children. NCEP 2001 ATP III guidelines also recommend discontinuing HMG-CoA reductase inhibitors in pregnancy due to their teratogenic effects. If triglycerides do not decrease with lifestyle changes, it may be necessary to initiate a pregnancy category B bile acid sequestrant. Bile Acid Sequestrant (cholestyramine, colestipol, colesevelam) are suitable for treatment of hypercholesterolemia NOT hypertriglyceridemia during pregnancy (clear data regarding safety of long-term use in pregnancy is not available). **F/U and labs**: lipid panel, s/sx of rhabdomyolysis **Patient education:** See pregnancy lifestyle counseling.
Dehydration	**Assessment:** Patient has had an increased BUN throughout hospital stay. This results in a BUN:SCr > 20, which is a sign of dehydration (hyperemesis gravidarum). BUN has been trending downward during her hospital stay. Rev Obstet Gynecol. 2012;5(2):78-84 doi: 10.3909/riog0176 **Goals for tx:** Ensure that patient stays hydrated to prevent dehydration complications Risk Factors/ Contributing factors: excessive vomiting **Current medication tx:** NS IV Fluids	**Stop:** IV Fluids **Start:** PO Fluids (water, etc) want to start slow and see if patient tolerates po start with ice chips if tolerated then can give patient water **Rational:** Patient had been on IV fluids because was unable to tolerate anything po. However, noted that patient is able to keep food down, so clinically improving. Since she may continue to experience morning sickness she will be at risk for dehydration. Therefore will be important to drink plenty of fluids. **F/U and labs:** Ensure patient remains hydrated. Can monitor BUN to SCr ratio and check-in with patient during prenatal visits. **Patient education:** She will be at risk for dehydration due to morning sickness. Therefore will be important to drink plenty of fluids during this time.

Pregnancy lifestyle Counseling	**Assessment:** Patient is pregnant: hCG=89 miu/mL **Goals for tx:** To make therapy adjustments that are safe during pregnancy, to implement lifestyle modifications, and to minimize complications. **Risk Factors/ Contributing factors:** Patient is pregnant, obesity, poor lifestyle (EtoH , smokes), low activity. **Nutrition:** If cold sores get especially painful or irritating a doctor can prescribe anesthetic gel (relieve pain) or antiviral oral medication (acyclovir (Zovirax), famciclovir (Famvir), and valacyclovir (Valtrex)) to speed healing or prevent recurrence. **Current medication tx:** Currently on NO prenatal therapies. Pt should be started on prenatal vitamins to insure enough vitamins/minerals are received during pregnancy.	**EtOH and smoking cessation:** See Health Maintenance **Education of teratogenic medications:** • Alert patient that many OTC and Rx medications are unsafe during pregnancy, so it is important to always make sure medications are safe during pregnancy • Avoid ACE/ARBs: Pregnancy Category D • Avoid Statins: Pregnancy Category X • Avoids NSAIDs: Pregnancy Category C/D > 30 wks; recommend to use Tylenol instead **Nutrition:** • Patient's BMI is 36 • The American Diabetes Association (ADA) recommends that nutrition therapy for GDM provide adequate nutrition to promote fetal and maternal well-being while achieving normoglycemia with absence of ketones, and providing adequate energy levels for appropriate weight gain in pregnancy. • Morbidly obese women, the caloric requirement is 12 to 14 kcal/kg/day (present pregnant weight) = 1,145 - 1,336 Kcal per day - A small (<5 kg) weight loss for women with BMI 35.0 to 39.9 appears to have more benefits than risks, and may not increase the risk of having a small for gestational age infant. - **2009 IOM weight gain recommendations** during pregnancy for BMI ≥30.0 kg/m2 is 11 to 20 lbs and should be in the 2nd and 3rd trimester • Carbohydrate intake needs to be distributed across meals and snacks to blunt postprandial hyperglycemia. Since insulin therapy is added to nutrition therapy, a primary goal is to maintain carbohydrate consistency at meals and snacks to facilitate insulin adjustments. Protein should also be in all meals and snacks to promote satiety and provide adequate calories. • Prenatal vitamin is also important to take to ensure that the required extra amounts of vitamins/minerals during pregnancy are received: important to have folic acid, iron, calcium, vitamin D **Exercise:** • ADA/ACOG recommends that, in the absence of either medical or obstetric complications, pregnant women exercise at a moderate level for 30 minutes or more per day on most, if not all, days of the week. - Healthy women who are not already highly active or doing vigorous-intensity activity should get at least 150 minutes of moderate-intensity aerobic activity a week during pregnancy and the postpartum period. Preferably, this activity should be spread throughout the week. • Because the safety of a vigorous level of aerobic activity during pregnancy has not been studied sufficiently, vigorous exercise is not recommended during pregnancy. However, in the absence of medical or obstetrical complications, fit pregnant women may engage in more vigorous activities under proper supervision and should be adjusted overtime.

		Nausea/Vomiting: • LJ originally presented to ED with severe vomiting and wasn't able to keep any food down. She had been receiving Phenergan 25 mg IV q4-6 hr prn. She is now able to keep food down. • **START:** Nonpharmological treatment for nausea o Non-pharmacologic options that may help reduce symptoms: get plenty of rest, avoid odors that bother you, instead of eating 3 large meals eat 5-6 smaller meals each day, eat a few crackers in the morning before getting out of bed, eat small snacks high in protein like milk or yogurt during the day, and avoid spicy/fatty foods. • Counsel patient on the fact that she may experience morning sickness throughout pregnancy. Symptoms usually start during the first 2 months of pregnancy. They are often worst around the second and third months. Most women feel better by 4 or 5 months, or around the middle of pregnancy. But some women feel bad for much longer. • Multivitamin, B6 (pyridoxine) may help reduce severity of morning sickness. Doxylamine may also be recommended. • If morning sickness is severe, physician may prescribe a prescription medication. Phenergan may not be the best option since pregnancy category C. Zofran could be appropriate option: pregnancy category B.
Health Maintenance	**Immunizations** **Assessment:** LJ's vaccine history unknown. Some vaccines are highly recommended for pregnancy **Goals for tx:** decrease infection possibility for mother and baby **Risk Factors/Contributing factors:** Gestational DM/pregnancy -Current medication tx: none	**Immunizations** **Start:** • Annual Influenza Vaccine (not Flumist), 1 dose of Tdap each pregnancy • Pneumococcal (PPSV23), Meningococcal, Hepatitis A and B may be recommended are recommended vaccines that the patient is indicated for due to her pregnancy and DM per CDC. Tdap should be given during each pregnancy ideally between 27 and 36 weeks of gestation. All other indicated vaccines are able to be given during pregnancy per CDC. • Should NOT get the Varicella (Chickenpox), Zoster (Shingles), and MMR Vaccine during pregnancy – should not receive any live vaccinations during pregnancy **Rational:** Recommendations based on CDC guidelines specifically for pregnancy **Whooping Cough (Pertussis)**: Whooping cough is one of the most common vaccine-preventable diseases in the United States. It is caused by bacteria that spread easily from person to person through personal contact, coughing, and sneezing. It can be very serious for babies and can cause them to stop breathing. Pregnant women should receive a dose of Tdap during each pregnancy, preferably at 27 through 36 weeks - to protect themselves and their baby. In addition, all family members and caregivers (like babysitters or grandparents) of infants should also get vaccinated with Tdap. **Flu**: It is safe, and very important, for a woman who is pregnant to receive the inactivated flu vaccine (also called the "flu shot"). Pregnant women who get the flu are at increased risk for severe illnesses from influenza and their babies are also at risk. Complications from the flu can include premature labor, babies that are small for

		gestational age, hospitalization, and, rarely, death. risk for serious complications and pregnant woman with flu also have a greater chance for serious problems for their unborn baby, including premature labor and delivery. Pregnant women can receive the flu shot at any time, during any trimester. In addition, because babies younger than 6 months are too young to receive flu vaccine, it is important that everyone who cares for your baby also get a flu vaccine **F/U and labs:** anaphylaxis, injection site reaction **Patient education:** Must stay for 15 minutes for observation, may feel fatigued and sore from injection site, mild fever, may take TYLENOL (specifically for influenza vaccine). Could also use a cold pack to ice the area is sore or red. Encourage patient to have all relatives who will be around the baby get the tdap vaccination (per CDC immunization recommendations).
	Smoking Cessation **Assessment:** Smokes 1 ½ ppd X 10 yrs **Goals for tx:** To stop smoking, to prevent secondhand smoke exposure, to prevent relapse of smoking **Risk Factors/Contributing factors:** Patient has an extensive history of tobacco use and is pregnant. Smoking while pregnant can put LJ at high risk for pregnancy-related complications and can also put her baby at risk for long-term illnesses such as asthma and obesity. **Current medication tx:** None	**Smoking Cessation** **Start:** Assess patients' readiness to quit. Use the "5 A's": Ask, Advise, Assess, Assist, and Arrange. Counsel patient on smoking cessation (and this risk vs benefit of nicotine replacement products) Encourage her to seek expert option from her gynocologist. Nicotine product recommendation may be appropriate. **Rational:** Smoking cessation is very important to achieve in pregnant patients. Counseling patients on the benefits of smoking cessation is very important. However, the evidence behind using nicotine products or other pharmacologic products is very mixed. The use of nicotine and other pharmacologic products for smoking cessation have not been evaluated sufficiently. All studies in the U.S. with nicotine replacement in pregnancy have been stopped early because of pregnancy effects or failure to demonstrate effectiveness. If nicotine products are utilized, patients should be committed to not smoking, should be counseled on risks associated with smoking during pregnancy and risks associated with nicotine replacement products. (ACOG) **F/U and labs:** Have open communication with patient on status of smoking cessation. **Patient education:** Discuss smoking cessation and patient's progress during each prenatal visit.

Health Maintenance Cont	**Use of Alcohol** **Assessment**: Occasionally drinks wine with dinner. Also, drinks alcoholic beverages during monthly ladies night. **Goals for tx:** To discontinue use of alcohol, to prevent alcohol withdrawal, and prevent complications associated with alcohol use during pregnancy **Risk Factors/Contributing factors:** Patient drinks alcohol some and she is pregnant. Alcohol use while pregnant can put patient and baby at risk for pregnancy-related complications. Some include birth defects, nutritional deficiencies, injuries, psychiatric problems, chronic diseases such as cirrhosis. Fetal alcohol syndrome. **Current medication tx:---** **Safe Sex Practices**: See Herpes section **Cancer Screening** **Assessment:** LJ's cancer screening unknown. **Goals for tx:** To detect cancer early on if applicable. **Risk Factors/Contributing factors:** Patient is sexually active and in her 30s. **Current medication tx**:---	**Use of Alcohol** **Stop:** Recommend that LJ does NOT drink any alcohol during pregnancy. **Rational:** At-risk drinking is associated with complications. At-risk drinking is classified as drinking more than 7 drinks in one week or 3 drinks on one occasion. There is no safe level of alcohol in pregnancy established therefore is important to avoid alcohol. **F/U and labs:** Monitor patient's alcohol intake. **Patient education:** Discuss with patient the risks associated with alcohol during pregnancy and the importance in avoiding alcohol. Discuss during each prenatal visit. ACOG **Safe Sex Practices**: See Herpes section **Cancer Screening** **Start:** **Breast Cancer Screening:** Breast Self-Exam (BSE); Clinical Breast Exams (CBE) q3 yrs **Cervical Cancer Screening:** Pap test + HPV test (co-test) q 5 yrs **Rational: Breast Cancer Screening:** Recommended per American Cancer Society (ACS) that women in their 20s start BSE; Recommended per ACS that women in their 20s and 30s have CBE q3 yrs. Important to talk to physician about next time to have mammogram and it is important to notify physician if notice any lump during pregnancy **Cervical Cancer Screening:** Recommended that preferred method per ACS is that women between 30 and 65 y/o have co-test q 5 yrs **Patient education:** Make sure patient knows to notify physician anytime she notices something abnormal
Adherence	LJ stated that she often doesn't take her medications.	Counsel LJ on importance of taking all of her newly prescribed medications. Stress importance in not skipping a dose. Discuss with patient it is important to take all of her meds to not only improve her health, but also enable her to have a safe pregnancy, etc. recommend possible pill box, or automatic refills from the pharmacy
Allergies	**Assessment:** Patient states that she had seasonal allergies for as long as she can remember. **Goals for tx:** Improve symptoms Risk Factors/ Contributing factors: None known **Current medication tx:** Fexofenadine 60 mg BID	**Stop:** Fexofenadine **Start:** Neti pot can also be used (second generation antihistamine is thought to be safe during pregnancy, such as cetirizine). **Rational:** Fexofenadine is pregnancy category C and information related to use during pregnancy is limited; so

		other agents are preferred. Should not use in 1st trimester; however after first trimester, weigh the risks versus benefits for use. Therefore, best option for pregnancy is neti pot. **F/U and labs:** monitor symptoms for relief **Patient education:** In addition to pharmacologic recommendations, there are non-pharmacologic recommendations that can be utilized to relieve symptoms associated with seasonal allergies. Recommendations include: avoid/removal of triggers, keep rooms clean, do not sleep with windows open at night, acupuncture, etc.