2013

ASHP Clinical Skills Competition

LOCAL COMPETITION CASE

2013 ASHP Clinical Skills Competition

LOCAL COMPETITION CASE

Directions to Clinical Skills Competition Participants

Identify the patient's acute and chronic medical and drug therapy problems. Recommend interventions to address the drug therapy problems using the forms supplied (Pharmacist's Patient Data Base and Pharmacist's Care Plan).

IMPORTANT NOTE: Only the Pharmacist's Care Plan will be used for evaluation purposes.

ASHP CLINICAL SKILLS COMPETITION 2013
PHARMACIST'S PATIENT DATA BASE FORM

Demographic and Administrative Information

Name: Rachel Andrews

Patient ID: 03202013
Room & Bed: 444-1
Physician: Simon
Pharmacy: Walgreens
Religion: "none"

Date of Birth: 1/8/1985
Height: 62 in; Weight: 147 lbs, Race: Caucasian

Prescription Coverage

Insurance: BCBS
Copay: $5 generic, $20 brand
Cost per month: n/a

Family's Annual Income: $34,000

Chief Complaint: Shortness of breath, chest tightness, light-headedness

History of Present Illness

RA presented to the emergency department this morning 4/13/13 stating "I feel like I can't breathe right". She complained of dyspnea, chest tightness, and light headedness on exertion.

Past Medical History

Lower extremity deep vein thrombosis (DVT) 8 years ago treated with warfarin for 6 months.
Seasonal allergic rhinitis

Allergies/Intolerances: nausea from warfarin

Outpatient Drug Therapy

Drug Name/Dose/Strength/Route	Prescribed Schedule	Duration Start–Stop Dates
1. Blowfish (Aspirin 500 mg & Caffeine 60 mg)	OTC – as needed hangovers	10/1/2012– present
2. Advil Allergy Sinus (Ibuprofen 200 mg, Pseudoephedrine 30 mg, Chlorpheniramine 2 mg)	OTC – daily for allergy symptoms	3/2013-present
3. Yaz (drospirinone/ethinyl estradiol)	1 tablet QHS	8/1/2012 – present

Medication History

RA was diagnosed with a symptomatic DVT in 2005 while attending college. At that point she was taken off of her oral contraceptives and treated with "some kind of shot" and warfarin for 6 months. She reports that the warfarin made her nauseated but she "knows she is not allergic". Last year, she moved to New York City and she admits that she did not tell her new OBGYN about her DVT because she wanted to start birth control again. She also binge drinks at weekend parties, and takes Blowfish (Aspirin and Caffeine) for her hangovers at least once a week.

Surgical History: None

Family History
Father: 56, alive, seasonal allergies, Type 2 diabetes
Mother: 57, alive, hypercholesterolemia, gout
Brother: 24, alive, no significant history

Social History
Smokes 1.5 PPD x 10 years
Drinks 5-6 drinks/night on most weekends
She is unmarried, a salesperson for a national publisher, travels regionally 2-3 times/month.

Vaccination history
Completed childhood series. Has already had Influenza vaccine this season.

Physical Exam (8/20/2013)
General: overweight young woman generally well-appearing
HEENT: PERRLA, EOMI, mildly inflamed nares
Chest: CTA bilaterally; tachypneic, good air movement in all lobes
CV: tachycardia, regular rhythm, no murmurs, rubs, gallops
Abd: soft, tender, bowel sounds present
GU: Deferred, Last menstrual period 2 weeks ago
Ext: no edema, pain or redness in any extremities, cap refill 3 seconds
Neuro: A&O x 3, CII-XII intact, (-) clonus

Vital signs
HR: 102 bpm
BP: 130/82 mmHg
Temp: 99.1 °F
RR: 22 breaths/minute
Pulse oximetry: 93-95% on room air.

	Admission labs
Metabolic Panel	
Na (mEq/L)	134
K (mEq/L)	4.1
Cl (mEq/L)	98
CO_2 (mEq/L)	27
BUN (mg/dL)	22
SCr (mg/dL)	1.1
Glucose (mg/dL)	110
Calcium (mg/dL)	9.2
Phosphorus (mg/dL)	3.7
Magnesium (mEq/L)	1.9
Albumin (g/dL)	3.8
AST (IU/L)	32
ALT (IU/L)	34
Total bili (mg/dL)	0.6

CBC	
WBC (million/mm^3)	7.4
Hgb (g/dL)	13
Hct (%)	40
Plt (K/mm^3)	354
MCV (fL)	90
MCH (pg)	30
RBC (mil/uL)	3.4
Other	
D-Dimer (ng/mL)	4300
Troponin (ng/mL)	0.01
PT (seconds)	12.4
INR	1.1
aPTT (seconds)	22.8
Urine Pregnancy test	Negative
Blood alcohol (mg/dL)	0.0

CT Angiogram of chest: Positive for pulmonary embolus, negative for edema, infiltrates, or structural abnormality.
Venous Doppler ultrasound: Small partially occluding thrombus in left femoral vein
Cardiac Echo: Slight right ventricle dilation, otherwise normal.
EKG: Sinus tachycardia

Compliance/dosing issue:
none

Current Drug Therapy

Drug name/dose/strength/route	**Prescribed schedule**	**Start date**	**Indication**
Enoxaparin 70 mg subcutaneous	Now then every 12 hours	Today	Pulmonary Embolism
Oxygen 2liters by nasal cannula	PRN for dyspnea or SaO2 < 90%	Today	Pulmonary Embolism

Patient Narrative
RA was diagnosed with DVT and pulmonary embolism. She was given 70 mg of enoxaparin in the Emergency Department and recommended for admission to the medical floor for observation overnight because of her dyspnea on exertion. She is not currently using her oxygen. An alcohol withdrawal assessment was negative. The hospitalist has consulted the pharmacy anticoagulation service for recommendations and follow-up.

Pharmacist's Care Plan

Using the patient's data, you will be able to develop an effective care plan for your patient. Clearly define the health care problems. Health care problems include treatment of all acute and chronic medical problems, resolution of all actual or potential drug-related problems, and identification of any other health care services from which your patient may benefit.

Remember to think about potential medical problems for which your patient may be at risk and disease prevention and disease screening activities that may be appropriate to recommend. Also, don't forget to consider specific patient factors that may influence your goals and recommendations for therapy (e.g., physical, psychological, spiritual, social, economic, cultural, and environmental).

To complete your care plan, specify all of your patient's health care problems that need to be addressed. Then prioritize the problems into one of three categories: (1) Most urgent problem, (2) Other problems that must be addressed immediately (or during this clinical encounter), OR (3) Problems that can be addressed later (e.g. a week or more later/at discharge or next follow up visit). Please note that only **one** problem should be identified as the "most urgent problem."

Then **for each problem** describe the (1) therapeutic goals, (2) recommendations for therapy, and (3) monitoring parameters and endpoints. Your monitoring parameters should include the frequency of follow-up and endpoints should be measurable by clinical, laboratory, quality of life, and/or other defined parameters (e.g., target HDL is greater than 50 mg/dL within 6 months).

Evaluated for competition

ASHP Clinical Skills Competition - Pharmacist's Care Plan

Problem Identification and Prioritization with Pharmacist's Care Plan

Team # _____

A. List all health care problems that need to be addressed in this patient using the table below.
B. Prioritize the problems by indicating the appropriate number in the "Priority" column below:
   1 = Most urgent problem (Note: There can only be one most urgent problem)
   2 = Other problems that must be addressed immediately or during this clinical encounter; **OR**
   3 = Problems that can be addressed later (e.g. a week or more later/at discharge or next follow up visit**)**

**Please note, there should be only a "1", " 2", or "3" listed in the priority column, and the number "1" should only be used once.*

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints

Evaluated for competition

ASHP Clinical Skills Competition - Pharmacist's Care Plan

Problem Identification and Prioritization with Pharmacist's Care Plan

Team # _____

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints

Evaluated for competition

ASHP Clinical Skills Competition - Pharmacist's Care Plan

Problem Identification and Prioritization with Pharmacist's Care Plan

Team # _____

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints

Evaluated for competition

ASHP Clinical Skills Competition - Pharmacist's Care Plan

Problem Identification and Prioritization with Pharmacist's Care Plan

Team # _____

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints

Evaluated for competition

ASHP Clinical Skills Competition - Pharmacist's Care Plan

Problem Identification and Prioritization with Pharmacist's Care Plan

Team # _____

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints

Evaluated for competition

ASHP Clinical Skills Competition - Pharmacist's Care Plan

Problem Identification and Prioritization with Pharmacist's Care Plan

Team # _____

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints

Evaluated for competition

ASHP Clinical Skills Competition - Pharmacist's Care Plan

Problem Identification and Prioritization with Pharmacist's Care Plan

Team # _____

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints

2013

ASHP Clinical Skills Competition

LOCAL CASE ANSWER KEY

Evaluated for competition

ASHP Clinical Skills Competition - Pharmacist's Care Plan - 2013 Local Answer Key

Problem Identification and Prioritization with Pharmacist's Care Plan

Team # _____

A. List all health care problems that need to be addressed in this patient using the table below.
B. Prioritize the problems by indicating the appropriate number in the "Priority" column below:
   1 = Most urgent problem (Note: There can only be one most urgent problem)
   2 = Other problems that must be addressed immediately or during this clinical encounter; **OR**
   3 = Problems that can be addressed later (e.g. a week or more later)

**Please note, there should be only a "1", " 2", or "3" listed in the priority column, and the number "1" should only be used once.*

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints

Recurrent DVT with Pulmonary Embolus	**1**	• Maintain O2 saturation > 90%
		• Anticoagulate with either
		  o xarelto,
		  o enoxaparin, or
		  o fondaparinux
		  o adjusted dose warfarin with goal INR 2.0-3.0
		• Minimize thrombotic risk factors
		• Minimize bleeding risk
			• Supplement oxygen as required for comfort or O2 Saturation < 90%
			• Initiate full dose anticoagulation
			  o Xarelto (rivaroxaban) 15 mg PO BID with meals x 21 days, then 20 mg daily with dinner for 6 months to life
			  ----OR---
			  o LMWH at full therapeutic dosing
			  ▪ Enoxaparin 100 mg q24h OR Enoxaparin 70 mg twice daily for 6 months to life
			  o Adjusted does warfarin starting with 5 mg daily and daily INR monitoring
			• Diet, compliance, and bleeding education
			• Discuss risk factors for continuing oral contraception
			• Stop smoking
			• Minimize alcohol consumption
			• Educate patient on signs/sx of bleeding/overanticoagulation
			  o Bruising, sx of GI/GU bleeding, nosebleeds, gums bleeding, etc
				• Continuous pulse oximetry overnight
				• Monitor for signs/symptoms of bleeding
				• Repeat CBC to check for occult bleeding and platelet count
				  o Repeat in AM and with monthly checkup

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints
Binge drinking	**2**	• Limit alcohol to max of one drink per day	• Educate patient regarding short term risks of hangover, injury, falls, violence, and risky sexual behaviors and long term complications of excess alcohol (liver, cardiovascular, neurologic, social risks) • Encourage safe alcohol use • Recommend local resources for assistance o Alcoholics anonymous or other local support groups	• Monitor self-reported alcohol use • Monitor and inquire about participation in support groups if recommended
Aspirin/NSAID use	**2**	• Minimize aspirin and NSAID use	• Recommend acetaminophen (up to 2 grams daily – see jundes notes) for analgesia • Stop blowfish for hangovers • Stop advil sinus allergy • Avoid aspirin and other NSAIDs while on anticoagulant therapy • Educate patient on signs/sx of bleeding/overanticoagulation o Bruising, sx of GI/GU bleeding, nosebleeds, gums bleeding, etc o	• Monitor aspirin and other analgesic use.
Smoking	**2**	• Stop smoking	Address 5-A's of cessation • Ask about tobacco use • Advise to quit • Assess willingness to quit (see notes) • Assist with quitting a. Set a quit plan b. Provide practical counseling for barriers c. Recommend adjunct therapies i. Nicotine patch ii. Intermittent therapy (lozenge, gum) iii. Varenicline (see notes iv. Burpropion (see notes)	• Review 5 A's at every visit

Health Care Problem	Priority	Therapeutic Goals	Recommendations for Therapy	Monitoring Parameters and Endpoints
			• Arrange follow-up support	
Birth control	**2**	• Initiate alternate contraception that minimizes thrombotic risk	• Stop Yaz • Educate on use of non-pharmacologic barrier methods o Condoms, Intra-uterine device (IUD) • Alternately. recommend progestin only oral contraceptive (Depo-provera, other pills) o Should Nuvaring, patch NOT appropriate • Educate regarding avoidance of estrogen containing oral contraceptives • Educate on pregnancy risk with warfarin	• Re-educate on contraception • Regular follow-up with OB-GYN • Mentsration, pregnancy status
Allergic rhinitis	**3**	• Minimize symptoms of allergic rhinitis	• Stop advil and avoid NSAID containing therapies • Recommend use of OTC 2nd generation antihistamines (loratadine 10 mg daily, cetirizine 10 mg daily, or fexofenadine 180 mg daily) • Educate on ADRs including sedation and anticholinergic side effects • First line use of intranasal steroid is equally appropriate to antihistamine recommendation. o F used, education on usage is necessary	• Monitor symptom qualities and frequencies • Monitor for sedation, anticholinergic signs/sx • If steroids recommended, monitor for signs/sx of upper respiratory infections
		•	•	•