

ASHP CLINICAL SKILLS COMPETITION PHARMACIST'S PATIENT DATA BASE FORM

Demographic and Administrative Information			
Name: SJ		Patient ID: 713-57-8492	
Address: 4247 S 82 nd Street		Room & Bed: 512B	
Omaha, NE 68114		Physician: J Patel	
Date of Birth: 5/27/28		Pharmacy: Walgreens (90 th & Dodge)	
Height: 5'2" Weight: 168 lbs		Race: African American	
Gender: Female		Religion: Christian	
History of Present Illness	Vitals	12-03-01	05-04-02
Patient was admitted to the hospital last night for acute GI bleed secondary to chronic GERD & NSAID ingestion. She is feeling better today, more alert & full of strength. SJ began experiencing chest discomfort, dizziness, weakness / feeling faint & rapid heart rate, which prompted her visit to the ER.	Blood pressure	148/78	100/64
	Pulse	82	112
	Temp	98.8	99
	Resp	20	22
Past Medical History	Chemistries	12-03-01	05-04-02
Hypertension x 15 years	Na	135	130
Osteoarthritis x 15 years [bilat. hands & knees]	K	4.0	5.0
Hyperlipidemia x 9 years	Cl	99	95
Gastroesophageal Reflux Disease x 9 years	CO2	25	27
Diverticulosis x 9 years	BUN	12	28
S/P Total abdominal hysterectomy (3/84)	SCR	1.2	1.7
S/P Cholecystectomy (3/84)	FBG	86	105
S/P TIA (12/96)	Calcium	9.2	9.2
	Albumin	4.2	3.8
	AST	27	29
	ALT	32	30
Family History	Hematology	12-03-01	05-04-02
Father: ↓ at 68 yr. secondary to MI; also had OA	WBC	5.2	6.5
Mother: ↓ at 33 yr. due to complications during childbirth	Hgb	13.5	9
Sister: ↑ 70 yo with OA & dyslipidemia	Hct	38	30
Sister: ↑ 69 yo with cataracts, diverticulosis, HTN & S/P MI (3/99)	Plts	200	225
Brother: ↑ 67 yo with GERD & OA	MCV	92	90
Brother: ↓ 3 yr. secondary to polio	PTT	25	27
[↓ = deceased; ↑ = living]	INR	1.0	1.1
	Retic	1	3.5
Social History	Lipids	12-03-01	05-04-02
Smoking: 1 ppd x 42 years	TC	221	275
EtOH: 1-2 glasses of red wine or beer 2x/month	TG	150	345
Caffeine: Diet soda 3-4 cans/day	HDL-C	50	55
	LDL-C	141	151

**ASHP CLINICAL SKILLS COMPETITION
PHARMACIST'S PATIENT DATA BASE FORM (Cont.)**

Lifestyle	Urinalysis	12-03-01	05-04-02
Occupation: Administrative assistant for local insurance company Status: Widow x 7 yr.; lives in Omaha alone Children: 3 daughters & 2 sons. Two children, son & daughter, reside locally others scattered across USA. Physical Activity: No regular exercise routine. Tries to maintain an active lifestyle, but somewhat hindered by OA. SJ reports that she tries to walk extra when out shopping, ex. while at grocery store and malls; occasionally will walk around the neighborhood with friends, however fearful to walk alone. Diet: Attempts made towards a low salt & cholesterol diet. SJ has previously visited with dieticians. Admitted to some indiscretions; enjoys fried foods, 'snack foods' & desserts.	Glucose Ketones SG pH Bacteria WBC RBC Protein Leuk Est Nitrite	- - 1.02 5.5 - - - - -	- - 1.02 6.2 - - - - -
Procedures	Ancillary Labs	12-03-01	05-04-02
EKG: Sinus tachycardia; VR = 112 bpm Endoscopy with biopsy: Grade 2 esophagitis, no Barrett's epithelium; note 6mm antral ulcer. Biopsy shows histologic presence of H Pylori, findings verified by + urease HemmoCult: 2/3 positive Barium: confirm presence of bleeding 6mm antral ulcer Colonoscopy: diverticuli noted, no inflammation, ulceration or bleeding appreciated	TSH H pylori IgG:		3.8 +
Physical Exam			
Gen: Pleasant African American woman in mild distress reporting to ER with CC of complaints of chest discomfort, dizziness, weakness/feeling faint & rapid heart rate. During the last week she has been experiencing abdominal cramping & noticed a change in bowel movements: more loose than usual (increase from daily stool to 2-3/day), color change from medium to very dark brown & stickier in consistency. Denied observation of blood in stool, commode or on paper. She denied any recent changes in diet or other acute illnesses. VS: BP 100/64 (seated); P 112; RR 22 (non labored); Wt 168 lbs HEENT: NCAT; PERRLA; appreciate beginnings of cataract bilaterally; oral mucosa is somewhat dry in appearance, - ulceration, appreciate partial dentures on top Skin: Unremarkable; warm & dry to touch Neck: No JVD or thyromegaly; bruit appreciated on left, none right Heart: Regular rhythm with rapid VR Lungs: CTA Abdomen: No organomegaly; +BS; mild guarding & tender to deep palpation, no rebounding; well healed surgical scar GU: + guiac; remainder of exam deferred Extremities: No C/C/E; pulses 2+ bilaterally; slight tenderness but no swelling in OA affected joints; + crepitus (knees only)			

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Allergies/Intolerance's		Prescription Coverage	
PCN	Hives	Insurance: BCBS HMO (1°); Medicare (2°)	
Codeine	Nausea & vomiting	Copay: \$10 generic/\$25 brand	
Eggs	Hives & throat closure	Cost per month: ~\$100 (including OTC products)	
		Annual Income: \$35,000	
Current Drug Therapy			
Drug Name/Dose/Strength/Route	Prescribed Schedule	Duration Start-Stop Dates	Compliance/Dosing Issue
1. Enalapril 10 mg	BID	1-20-1999; currently on hold	
2. HCTZ/Triamterene 25/37.5	QD	7-19-1992; currently on hold	
3. Zocor 20mg	Daily at bedtime	5-12-1998	
4. Aspirin 81mg	QD	Discontinued on admission	
5. Daypro 600mg	QD	Discontinued on admission	
6. Pepcid AC	QD PRN	Discontinued on admission	
7. Maalox 1 tbsp	PRN	Discontinued on admission	
8. Metamucil 1 tbsp	QPM		
9. Multiple vitamin	QD		
10. D5W1/2NS IV	Rate per MD	Started on admission	
11. Acetaminophen 650mg	Q4-6° PRN	Started on admission	
12. Mylanta 1 tbsp	Q4° PRN	Started on admission	
13.			
14.			
Medication History			
Medication list confirmed with patient and community pharmacy records. Prior to admission SJ noted good tolerance of all medications. SJ admitted to missing evening doses of BP & lipid medications if falls asleep on couch (~1-2 x per week). Admitted to increasing need for Pepcid AC & Maalox over the past several weeks, despite no apparent change in diet. During this time her use of Metamucil decreased as stools became more loose & changed appearance (see PE).			

ASHP CLINICAL SKILLS COMPETITION PHARMACIST'S CARE PLAN

Clinical Significance	Health Care Need*	Pharmacotherapeutic Goals	Recommendations for Therapy	Monitoring Parameter(s)	Desired Endpoint(s)	Monitoring Frequency
Most Clinically Significant Problem	Acute GI Bleed	Identify site, verify etiology & stop bleed	- IV fluid replacement - Consider lavage & other emergency medications (i.e. pressors) depending on severity of process - Drug therapy options: <u>H2RA</u>*[#]: Famotidine 20mg IV Q12^o Ranitidine 50mg IV Q8^o Cimetidine 300mg IV Q8^o <u>PPI</u>*[#]: Pantoprazole 40mg IV QD - Treatment with either agent for 4-6 weeks (to heal ulcer) *Standard dosing used as CrCl is most likely reflective of change in vascular volume (vs. renal insufficiency); future adjustments as per pt factors [#]Per HMO/hospital formulary	- Vitals, Chem 7, LFT's, Hgb/Hct, retic count, stool frequency & consistency - Tolerance of & adherence to medications - Resolution of initial symptoms	Stop bleeding & heal ulcer	- Vitals: Q8^o - Labs: QD - PE: QD - Upon discharge, have patient RTC within 2 weeks for PE & repeat labs
Major Clinical Significance	GERD	- Patient asymptomatic prior to admission, however evidence of persistent reflux - Reduce esophagitis in order to avoid future complications	- Eliminate 2 °contributors: smoking, EtOH, caffeine, & NSAID - Educate pt regarding nonpharmacologic interventions: sleeping arrangements, avoid bending at waste &	- Signs/symptoms of GERD (i.e. need for antacids) - Tolerance of & adherence to medications - Physician may consider repeat	- Control of symptomatology - Improvement &/or resolution of esophagitis	- PE: QD - Upon discharge, have patient RTC within 2 weeks for PE & repeat labs

Major Clinical Significance	GERD (Continued)		lifestyle modifications (diet & PA) <u>Drug therapy options[#]:</u> ▪If started on IV H2RA, switch to PO prior to discharge & continue medication on outpatient basis ▪Determine duration of therapy based on patient parameters ▪If started on IV PPI, switch to PO prior to discharge, remainder same as noted for H2RA <u>Other options:</u> ▪OTC antacids PRN ▪Prokinetic agents [#] Per HMO/hospital formulary	endoscopy to re-evaluate esophagitis		
Major Clinical Significance	H pylori	▪Irradicate organism & prevent recurrence	▪Multiple treatment options available (i.e. dual, triple or quadruple therapy) ▪Patient allergic to PCN therefore avoid combination containing Amoxicillin <u>Medication options^{*#}:</u> ▪Bismuth Subsalicylate ▪Tetracycline ▪Metronidazole ▪Clarithromycin ▪H2RA	▪Monitor for resolution of signs/symptoms ▪Tolerance of & adherence to medications ▪Urea breath test: perform 4-6 after completion of H pylori tx; must be medication free for at least 2 weeks prior to exam	▪Irradication based on physical findings & other findings/tests	▪Upon discharge, have patient RTC within 2 weeks for PE & repeat labs ▪Urea breath test &/or stool antigen test as noted in monitoring parameters

Major Clinical Significance	H pylori (Continued)		•PPI •Usually treatment duration is 10-14 days •<u>DOC</u>: Amoxicillin, Clarithromycin & Omeprazole •[#]Per HMO formulary	•Stool antigen test: perform 4-6 after completion of H pylori tx		
Major Clinical Significance	CVD (& CHD) Prevention	•Secondary prevention	•Difficult to discern how much of a role aspirin played in development of GI bleed •If feel to risky to re-institute, consider Clopidogrel (75mg QD); third line is Ticlopidine[#] •[#]Per HMO formulary	•Vitals & labs depend on agent selection •Tolerance of & adherence to medications	•Prevention of recurrent TIA or other CVD/CHD event; slow progression of atherosclerosis	•Assess monitoring parameters at each MD visit
Major Clinical Significance	Hypertension	•Normal blood pressure (i.e. <140/90)	•Current BP is acceptable (even low), but most likely affected by acute medical process •Continue to monitor & re-institute home meds as appropriate •BP from 12/01 shows ISH, however lone reading & pt admitted to some noncompliance, therefore difficult to fully interpret •Consider purchase of home BP monitoring	•BP, HR, fatigue, SOB, angioedema/cough, BUN/SCr, K •Tolerance of & adherence to medications	•BP < 140/90 mmHg (i.e. normotensive)	•Vitals Q8° while in house & during each MD visit •Home BP monitoring <u>or</u> visit to local pharmacy as dictated per changes in medication or symptomatology

Major Clinical Significance	Hypertension (Continued)		device <u>or</u> regular visits to local pharmacy for evaluation ▪If purchase home BP monitoring; patient should have accuracy of monitor checked against device used in MD office ▪Once accuracy is confirmed, home readings can be used to guide future medication recommendations ▪Discuss importance of adherence; review medication intake with patient in order to determine better schedule so as to avoid missed doses			
Major Clinical Significance	Dyslipidemia	▪Secondary prevention, therefore LDL goal <100	▪Current labs are most likely in nonfasting state ▪If 12/01 labs were performed in fasting state, then patient requires ~34% reduction in LDL to attain goal ▪Adherence with medication may affect lab values, therefore need to counsel pt of importance of not missing doses; also	▪Fasting lipid profile & LFT's ▪Tolerance of & adherence to medications [GI complaints (upset or change in bowel habits), muscle cramps, headache & insomnia]	▪LDL-C < 100 mg/dL ▪Prevention of recurrent TIA or other CVD/CHD event; slow progression of atherosclerosis	▪Repeat lipid profile & LFT's ~ 6 weeks after discharge (coordinate with other lab draws)

Major Clinical Significance	Dyslipidemia (Continued)		inquire during visit in order to accurately interpret values ▪Repeat labwork & if values remain c/w present, consider increase in Zocor dose (max 80mg QD). ▪Consider change to more 'potent' statin such as Lipitor, however selection may depend on HMO formulary			
Major Clinical Significance	Medication Adherence	▪Enhance patient understanding of medical issues ▪Acceptable medication tolerance: balance control of medical issues with medication tolerance ▪Review importance of adherence (& procedure if medication is missed)	▪Educate patient on new medical conditions ▪Review new medications, including rationale for use, administration, side effects, adherence & monitoring	▪Evaluate continued understanding of medical issues ▪Tolerance of & adherence to medications	▪Patient demonstrates understanding of all therapies & goals ▪Enhanced medical status & enable pt to maintain (or at least slow progression)	▪Evaluate at each medical visit ▪Daily attempts towards medication adherence
Less Clinically Significant	Osteoarthritis	▪Alleviate pain ▪Maintain adequate range of motion (i.e. maintain AODL)	▪Continue to hold NSAID therapy during hospitalization ▪Assess utility of Acetaminophen (APAP)	▪Pain relief (can use VAS) ▪Tolerance of & adherence to medications	▪Pain relief ▪Limit reductions in ROM	▪Upon discharge, have patient RTC within 2 weeks for PE & repeat labs; include OA

Less Clinically Significant	Osteoarthritis (Continued)		for pain relief; depending on dz severity, regular daily use may be sufficient <u>Drug Therapy Options[#]:</u> If APAP is insufficient, multiple options exist: •NSAID or COX 2I + GI protectant (depending on how MD feels towards NSAID as contributor to GI bleed—i.e. benefit vs. risk) •Tramadol (Ultram) •APAP + narcotic pain reliever [#]Per HMO/hospital formulary <u>Other options:</u> •Glucosamine ± Chondroitin •Steroid injections (intra-articular) •Collagen injections (intra-articular) •Enhance physical activity level (maintain or increase mobility & assist with weight reduction).	•PE to assess ROM & dz progression •Ability to perform AODL		assessment
Less Clinically Significant	Diverticulosis	•Maintain adequate control of symptoms, avoid acute attacks, including bleeding diverticuli	•Maintain dietary restrictions (i.e. foods that contain seeds or nuts, etc.) •Continue Metamucil	•Bowel habits & results of movements (i.e. stool color & texture)	•Maintain adequate control of symptoms, avoid acute attacks, including	•Assess monitoring parameters at each MD visit

Less Clinically Significant	Diverticulosis (Continued)				bleeding diverticuli	
Less Clinically Significant	Smoking Cessation	•Smoking cessation	•Offer nicotine replacement or bupropion •Selection of pharmacologic agent will depend on review of patient's medical background & previous cessation efforts (i.e. prior drug therapy, types of withdrawal symptoms or other symptomatology, etc.) •Patient has partial dentures, therefore may not be able to tolerate gum •HMO formulary may affect drug selection	•Tobacco use, cotinine levels, signs/symptoms of withdrawal, weight gain, etc. •Tolerance of & adherence to medications (as applicable)	•Cessation / abstinence	•Depends on patient interest & plan (drug & counseling) •If patient elects not to stop, then encourage at every MD visit •If patient decides to attempt cessation, then post-discharge, schedule regular meetings (weekly initially then space as per patient response)
Less Clinically Significant	Osteoporosis Prevention	•Reduce fracture risk Literature suggests the African American race has a lower risk for developing osteoporosis, however	•Consider BMD evaluation to determine patients risk •Lifestyle modifications: watch EtOH & caffeine intake, smoking cessation & increase physical	•Lifestyle modifications, vitals, lipid profile (if ERT initiated) •Tolerance of & adherence to	•Slow progression of bone loss & avoid fractures	•Review of lifestyle modifications & vitals at each MD visit

Less Clinically Significant	Osteoporosis Prevention (Continued)	this patient has several risk factors that may counteract genetics: •EtOH •Smoking •Caffeine •S/P TAH •OA •GI disorder •Reduced activity level/weight •Age •Potential pro: Diuretic tx	activity level •Maintain/increase dietary Calcium: no ERT 1500 mg QD; ERT: 1000 mg QD •Vitamin D 400 IU QD •ERT if no contraindications & patient is interested; recommend PAP & mammogram prior to initiation <u>Other options (treatment vs. prevention) #:</u> •Alendronate •Raloxifene •Calcitonin •Fluoride #Per HMO formulary	medications		•Repeat lipid profile & LFT's ~ 6 weeks after ERT initiated •Consider annual BMD
Less Clinically Significant	Patient Education: Lifestyle Modifications (Diet/Physical Activity)	•Enhance patient understanding of medical issues •Acceptable lifestyle	•Educate patient on new medical conditions •Ascertain present understanding of required lifestyle modifications; develop realistic pt-specific modification goals (diet, PA, smoking cessation, EtOH & caffeine intake)	•Evaluate continued understanding of medical issues, medications & lifestyle requirements •Adherence with dietary restrictions •PA level: changes since last visit (including reason)	•Patient demonstrates understanding of all therapies & goals •Enhanced medical status & enable pt to maintain (or at least slow progression)	•Evaluate at each medical visit •Daily attempts towards diet & PA

*Health care needs include actual and potential medical problems and drug-related problems as well as any other health care services from which your patient may benefit.