ASHP CLINICAL SKILLS COMPETITION

# PHARMACIST'S PATIENT DATA BASE FORM

| Demographic and Administrative Information | | | |
|---|---|---|---|
| Name DG | | Patient ID 54321 | Room No. |
| Address Anytown, USA | | MD Smith | |
| | | Pharmacy | |
| Date of Birth 8-16-50 | | Race Caucasian | Gender Male |
| Height 5'11'' | Weight 180 lbs | Religion Catholic | |
| Admission Date | | Occupation Mechanical Engineer | |

**History of Present Illness** DG is a 48 yr old white male who is a new patient to your clinic after moving here from out of state. Had received all previous medical care from his primary clinc for 10 yrs before moving out of the area. Here today requesting medication refills, has appt. with new primary physician in 2 weeks.

**Past Medical History/Surgery**

Hypertension X 5 years
Hyperlipidemia X 1 year (had 6 month trial off drug therapy before starting drug therapy)

**Family and Social History** married, has 2 teenage children. Tobacco: 1 pack per day cigarettes for 25 years, quit 5 years ago, restarted 3 months ago after moving, has tried to quit but can't get through cravings. Alcohol: 1-2 beers q 3-4 days

**Lifestyle** Exercise: no formal exercise, walks the dog occasionally. Diet: follows no particular diet, eats red meat 2-3 times/week, does not eat the skins of meat, cuts off excess fat, fried foods less than once/week. No sweets. + salt to food.

**Acute and Chronic Medical Problems**

1.
2.
3.
4.
5.
6.
7.
8.

| Vital Signs/Laboratory Data—Initial/Followup | |
|---|---|
| Date | 10/10/98 |
| Wt | 180 lbs |
| Temp | 98.6 |
| BP | 152/96 |
| Pulse | 90 |
| | Today: |
| Na | 142 |
| K | 4.4 |
| Cl | 100 |
| $CO_2$ | 28 |
| BUN | 21 |
| Cr | 1.1 |
| Glu | 110 |
| Glyc Hgb | 5.2% |
| Ca | |
| Phos | |
| T Prot | |
| Alb | |
| Hgb | |
| Hct | |
| WBC | |
| PLT | |
| AST | 21 U/l |
| ALT | 2 U/l |
| LDH | 65 U/l |
| Alk Phos | 45 U/l |
| Bili | total: 0.2 mg/dl |

| 1 yr ago: | 6 mo. ago: | Today: |
|---|---|---|
| T. Chol 260 | 255 | 270 |
| Trig 130 | 130 | 130 |
| LDL 192 | 190 | 200 |
| HDL 42 | 40 | 42 |

All LFTs WNL throughout

| Drug Serum Concentrations |
|---|
| Date |
| Digoxin |
| Theo |
| Gent/Tob |
| Vanco |
| Phenytoin |



(continued)

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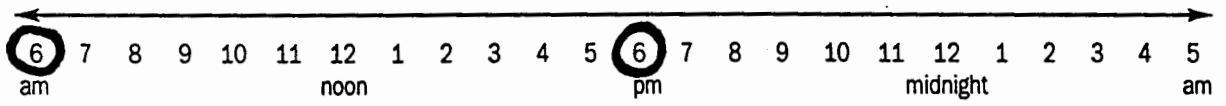
**Current Drug Therapy**

| Drug Name/Dose/Strength/Route | Prescribed Schedule | Duration Start-Stop Dates | Compliance/Dosing Issue |
|---|---|---|---|
| 1. Metoprolol 50mg PO | BID | X 3 years | |
| 2. E.C. Aspirin 325 mg PO | Q AM | X 6 months | |
| 3. Lopid 600 mg PO | BID | X 6 months | |
| 4. MVI PO | Q AM | X 5 years | |
| 5. HCTZ 25 mg PO | Q AM | D/c 3 yr ago | failure to control BP |
| 6. NO other BP or lipid medications in the past | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| | | | |

**Medications PTA**

| | |
|---|---|
| 1. N/A | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

**Time Line:** Circle actual administration times, and record appropriate medications and meals below.




Metoprolol
Lopid
Aspirin
MVI

Metoprolol
Lopid

**Allergies/Intolerances**

☒ No known drug allergies

| Allergen | Reaction |
|---|---|
| | |
| | |
| | |
| | |
| | |

**Social Drug Use**

| | |
|---|---|
| Alcohol | 1-2 q3-4 days |
| Caffeine | 3-4 cups/day |
| Tobacco | see social hx. |

| Cost of Meds/month |
|---|
| $ |
| Insurance: ☒ Yes ☐ No |
| Copay $12/brand, $6/gen |
| Medicaid |
| Annual Income |
| $ 53,000/yr |

**Notes** Takes meds regularly, no problems paying for them. Family History: Father had an acute myocardial infarction at age 50, still alive. Mother has history of hypothyroidism for which she is controlled with meds.



*(continued)*

**ASHP CLINICAL SKILLS COMPETITION**
**PHARMACIST'S PATIENT DATA BASE FORM**
CONTINUED

Physical Exam: 51 year old, well-developed, slightly overweight male in no acute distress

Ht: 5'11" Wt: 180 lb BP 152/96 HR: 90 (took BP meds today)

HEENT: PERRLA, conjunctiva WNL. No corneal arcus or xanthelasma

Skin: WNL

Cardiac: + S1, S2, -S3, -S4; no murmurs

Lungs: + breath sounds with good air movement

ABD: + BS, -splenomegaly, - masses

Neuro: A & O X 3, CN I-XII intact, motor 5/5. DTR symmetrical and WNL

Upon questioning: patient reports no problems with CP, SOB, dizziness, fatigue, edema, paresthesias. He knows he needs to stop smoking but is not concerned about other lifestyle modifications. "I'm healthy, I feel fine."

Lab: From previous medical records transferred here:

1 year ago: Chol: 260 Trig: 130 LDL: 192 HDL: 42
Step I diet initiated, exercise encouraged

6 months ago: Chol: 255 Trig: 130 LDL: 190 HDL: 40
BP 132/84 LFTs WNL
Step II diet initiated, exercise encouraged, Lopid 600 mg BID started

Today's Labs: Na 142 Cl 100 BUN 21 FBG 110
10/10/98 K 4.4 CO2 28 Cr 1.1 Hgb A1c 5.2%

LFTs all WNL

Total Chol 270 Trig: 130 LDL: 200 HDL: 42

**ASHP CLINICAL SKILLS COMPETITION**
**Drug Therapy Assessment Worksheet**
**Answer Key**

1. Correlation between Drug Therapy and Medical Problems
   Hypertension: Metoprolol
   Hypercholesterolemia: Lopid
   CAD prevention: EC ASA

2. Appropriate drug selection:
   A problem exists: The patient's cholesterol problem is not controlled on the current regimen of Lopid. Lopid should be reserved for problems of hypertriglyceridemia, not for reduction of LDL. The patient's goal LDL is <130 considering risk factors of: male > 45 years of age, hypertension, current smoker, family history of AMI in male relative <55 years of age. (Following NCEP-II recommendations). Therefore he has a 35% LDL reduction necessary. Suggest stopping Lopid and change to the following: an appropriate starting dose would be any of the statins as follows:

   Lipitor 10 mg QD
   Baycol 0.3 mg QHS (will probably not be strong enough to reach LDL goal)
   Lescol 20 mg QHS (will need to increase to 80 mg qhs to achieve adequate reduction in LDL)
   Mevacor 20 mg QHS (may need to increase to 80 mg qhs)
   Pravachol 20 mg QHS (will need to increase to 40 mg qhs)
   Zocor 10 mg QHS (may need to increase to 20 mg qhs)

   The most cost-effective medication for the necessary LDL reduction is Lipitor 10 mg qhs.

   Monitoring recommended:
   Lipitor: Baseline LFTs, 12 weeks after initiation or dose change, then semiannually. Check Lipid profile in 2-4 weeks.
   Pravachol: Baseline LFTs, 12 weeks after initiation or dose change. Check lipid profile in 4-6 weeks.
   Mevacor: Baseline LFTs, 6 & 12 weeks after initiation or dosage change, semiannually. Check lipid profile in 4-6 weeks.
   Lescol: Baseline LFTs, 6 & 12 weeks after initiation or dosage change, semiannually. Check lipid profile in 4-6 weeks.
   Baycol: Baseline LFTs, 6 & 12 weeks after initiation or dosage change, semiannually. Check lipid profile in 4-6 weeks.
   Zocor: Baseline LFTS, 6 and 12 months after initiation or dose change. Check lipid profile in 4-6 weeks.

   CPKs only monitored if patient is symptomatic of muscle aches, weakness.

   Or as an alternative: start with Niaspan starter packet or cholestyramine powder, but need to monitor closely due to potential compliance problems with each. Published research does not suggest that either drug alone will reduce the LDL the necessary 35%, so both of these choices would be considered secondary to starting with a statin.

3. Drug Regimen:
   A problem exists. The patient's blood pressure is not adequately controlled, despite compliance with current metoprolol regimen. Suggest increasing dose to 100 mg BID

4. Therapeutic Duplication:
   No problem exists

5. Drug Allergy or intolerance:
   No problem exists

6. Adverse Drug Events
   No problem exists

7. Drug Interactions:
   No problem exists

8. Social or recreational drug use
   Patient should be encouraged to drink decaffeinated beverages due to potential for caffeine to increase BP
   Patient should be encouraged to decrease sodium intake
   Patient should be encouraged to stop smoking and may recommend nicotine patches or Zyban to help decrease cravings

9. Failure to receive drug therapy:
   No problem exists

10. Financial impact:
    No problem exists

11. Patient Knowledge of Drug Therapy
    No problem exists

Shaded area is evaluated for Competition

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# PHARMACIST'S CARE PLAN

Answer Key

Patient DG

Location/Room

Pharmacist

Date

| | Health Care Needed | Pharmacotherapeutic Goal | Recommendations for Therapy | Monitoring Parameter(s) | Desired Endpoint(s) | Monitoring Frequency |
|---|---|---|---|---|---|---|
| 1. | Mgmt of HTN to prevent morbidity | Control of BP without ADRs | Increase Metoprolol to 100 mg BID | BP, HR, compliance | BP less than 140/90 | BP in 2 wks at MD appt. Compliance at every visit |
| 2. | Mgmt of Cholesterol to prevent morbidity | Control of cholesterol w/ diet & meds | D/C Lopid<br>Start statin at appropriate doses<br>Diet, exercise | Lipids, LFTs, symptoms, compliance | LDL less than 130 | LFTs depend on therapy chosen(see DTAW). Compliance & ADRs q visit |
| 3. | Stop smoking | Stop smoking | Assess need for Zyban or nicotine patches.<br>Encourage smoking cessation. | NO Smoking ADRs from drug tx | NO SMOKING | Each visit |
| 4. | Improve diet & exercise | | Decrease caffeine & salt intake.<br>Exercise 30 min. 3-4 times/week.<br>Follow Step II Diet. | Weight, frequency of each | | Each visit |
| 5. | Risk for AMI/ Stroke | No events | Discuss life-style mod. such as smoking/ exercise/diet/ alcohol reduction as well as BP & cholesterol to reduce risk of future AMI or stroke | | | Reinforce each visit |