

 Pharmaceutical care practice

 PHAR412

Homework #2

Student name: Fairouz Zayed

Student ID: 1160750

Submission date: 3/10/2019

**Case #1**

Date: 3/10/2019

Time: 9:30 AM

Title: pharmacy’s SOAP notes for a patient with elevated INR.

S:

**Chief complaint**: the patient present to pharmacy for INR check.

**PMH**: hypertension and fib.

**Social history**:

The patient is following a low calorie diet.

Walking 3 mails daily.

He has not missed any doses in the past week and states that he rarely if ever misses doses of any of his meds

**Allergies**: NKDA

O:

**Vital signs:** Ht 5’10” Wt. 80 kg. BP 136/80 HR 65 RR 12

**Laboratory values:**

* INR (today) 3.9, previous steady state INR on this same dose was 3.7 two weeks ago.
* Lipid panel 1 wk ago: LDL 160 HDL 35 TC 225 TG 150
* 1 month ago: LDL 180 HDL 36 TC 250 TG 170
* 3 mos ago Na140/ K4.4 / Cl 100/ Co2 30/ BUN 14/ Scr 1.1/ glu 98 H/H 13/39 (hemoglobin/hematocrit)

**Physical exam:**

* CV: RRR (regular rate and rhythm) No m/r/g (murmur, rubs, gallops)
* Abd guiac neg NTND (Non-Tender, Non-Distended)
* Ext no bruising

**Current medications:**

Metoprolol XL 100 mg daily

Warfarin 2.5 mg daily

Centrum multivitamin

A:

Problem: the patient INR is elevated for a patient who is taking warfarin (goal2-3) which require warfarin dose adjustment (lowering the dose) or increase vitamin K levels by supplements

* The patient is consuming a very small amount of green vegies beside that his vitamins doesn’t contain vitamin k (i.e. vitamin k supplements or increasing intake of vegies) and also to reduce warfarin dose.

P:

Problem: high INR

* Pharm:

Recommended vitamin k supplement

Reducing warfarin dose

* Non-pharm:

Recommended to increase vegies and food that contain vitamin k intake.

* SMART goals:

-Goal is to reduce INR to normal levels as soon as possible.

-Keep vitamin K levels in normal range (high levels are bad too).

-To make sure that there is no complications because of elevated INR( bruising, blood in urine or stool)

* Monitoring parameters:

Patient and pharmacist to monitor for any bruising in 1 week

Monitor INR value in one week

* Follow up in 1 week with PCP to recheck INR.

**Case #2**

Date: 3/10/2019

Time: 10:30 AM

Title: pharmacy’s note for a drug and supplement interaction.

S:

**Chief complaint:** the patient arrived with a new prescription for levothyroxine (Synthroid) 0.125 mg PO daily. And also a bottle of calcium (OsCal) 500 mg.

 **PMH**: she started taking her Os Cal a couple of months ago in the am with her Synthroid.

**Allergies**: NKDA

O:

**Vital signs:** Ht 5’4” Wt 150lbs BP 130/80 HR 65

**Lab tests**: TSH: 7.5 microunits/mL

**Physical exam:**

PE: A & O x3

CV: RRR

HEENT WNL

**Current medications**: Synthroid 0.1 mg PO daily for the past 18 months for hypothyroidism

A:

Priority 1: calcium supplement interfere with the absorption levothyroxine, requiring advising the patient to avoid takin calcium supplement before 4 hours and after taking levothyroxine.

* The interaction is interfering with levothyroxine absorption causing elevated TSH levels. Leaving 4 hours between ca and levothyroxine is preferred over increasing levothyroxine dose

Priority 2: levothyroxine dose is recommended be retained to 0.1 mg instead of 0.125 mg

 ° The elevation of TSH is because levothyroxine is not absorbed well and not because it is a low dose (i.e. levothyroxine 0.1 mg is required) o need to increase the dose.

P:

Problem: interaction between calcium supplement and levothyroxine.

* Pharm:

0.1 mg levothyroxine

* Non-pharm:

-leave 4 hours before and after taking the levothyroxine and the calcium supplement.

* SMART goals

-goal is to reduce TSH levels to the normal range

-avoiding any side effects of increased levothyroxine dose

- improve quality of life by decreasing the symptoms of hypothyroidism

* Monitoring parameters:

Patient and pharmacist to monitor for any side effects in 1 month

Monitor TSH level in one month

* Follow up in 1 month with PCP to recheck TSH.

**Case #3**

Date: 3/10/2019

Time: 10:30 AM

Title: pharmacy’s note for a patient with uncontrolled blood pressure

S:

**Chief complaint**: the patient referred to the pharmacy for blood pressure assessment.

**HPI:** leg swelling as a side effect of amlodipine.

**Allergies:** Lisinopril

**Social history**: the patient drink alcohol, and smoke a pack a day, he fish as an exercise.

**Current medications:** atenolol 25 mg (half a tablet a day)

 Amlodipine 10mg

 Baby aspirin 81mg

O:

**Vs:** BP147/85, pulse 61

A:

**Priority 1**: high blood pressure needs additional therapy

 -the patient needs a diuretic to be added to his therapy (i.e. hydrochlorothiazide 12.5 mg) is preferred over rising amlodipine dose because of the swelling problem

**Priority2**: the patient is suffering from leg and feet swelling

-it is a side effect for amlodipine ( reduce the dose) or give a loop diuretic( furosemide)

------------------------------------------------------------------------------------------------------------

 P:

 Priority 1:uncontrolled high blood pressure requiring additional therapy

* + Pharm
* Recommended hydrochlorothiazide diuretic 12.5 mg in the morning
	+ Non-pharm
* Recommended decrease intake of sodium and improve the diet
* Recommended cutting off alcohol and smoking
* Do more exercise.
* SMART goals
* Goal is to keep BP in normal range <140/90
* To prevent target organ
* To prevent CV events for lifetime
* Monitoring parameters
* Monitor BP daily and record readings for PCP to be reviewed
* Monitor for side effects such as electrolytes imbalance
* Follow up in 3-4 weeks with the pharmD

 Priority 2: swelling due to amlodipine high dose

* + Pharm
* Recommended to reduce amlodipine dose to 5 mg
	+ Non-pharm
* Recommended decrease intake of sodium and improve the diet
* SMART goals
* Goal is reduce swelling caused by amlodipine
* To improve quality of life.
* Monitoring parameters
* Monitor leg swelling
* Monitor for side effects such as increased swelling or tiredness and increased sleepiness.
* Follow up in 3-4 weeks with the pharmD