

**2018 SNPhA/Kroger National Clinical Skills Competition**  
**Charlotte, NC**  
**Division II**

**CC**

“My anxiety doesn’t seem to be getting any better. I think the stress is what caused this awful pain on my left side that goes all the way to my back.”

**HPI**

Jane Doe is a 66-year-old African American woman who comes to the pharmacy to pick up her new medications as well as refills. She complains of a burning pain in her abdomen that worsens at night. The pain improves if she eats a small meal or takes an antacid. Her doctor diagnosed her with peptic ulcer due to an *H. pylori* infection.

Jane attributes her diagnosis to worsening anxiety from her upcoming retirement from teaching. Dealing with fibromyalgia pain was a factor in her decision to retire now. She looks forward to more time for herself but worries that her life will no longer have meaning. Jane was previously taking escitalopram 10 mg daily and was just switched to duloxetine 60 mg daily.

Smoking has always been Jane’s way to de-stress, but her best friend was recently diagnosed with lung cancer. Jane says this is her motivation for quitting. She has tried using over-the-counter nicotine replacement therapy (lozenges), but it didn’t work. She is wondering what other options are available to help her quit for good.

**PMH**

Fibromyalgia

Depression

Generalized anxiety disorder

Gout

Vaccines: childhood series complete; Zostavax® at age 60

**Medications**

Allopurinol 200 mg PO QD

Amoxicillin 1000 mg PO BID **\*NEW\***

Clarithromycin 500 mg PO BID **\*NEW\***

Duloxetine 60 mg PO QD **\*NEW\***

Omeprazole 20 mg PO BID **\*NEW\***

Pregabalin 75 mg PO BID

**SH**

Smokes 7-10 cigarettes per day

Has at least one cup of coffee each morning to start her day

Drinks only on “special occasions”

**FH**

Father has COPD and heart failure

Mother has diabetes and hypertension

**Allergies**

NKDA

**Vitals**

BP 138/88, P 72, RR 18, T 98, Weight 160 lbs, Height 5'2"

**Labs**

Na	136 mEq/L	WBC	6.4 K/ $\mu$ L
K	4.4 mEq/L	Hgb	15.1 g/dL
Cl	102 mEq/L	HCT	46%
CO <sub>2</sub>	23 mg/dL	Plts	366 K/ $\mu$ L
BUN	10 mg/dL	Albumin	3.9 g/dL
SCr	1 mg/dL	Uric acid	4.2 mg/dL
Glucose	85 mg/dL		
Ca	9 mg/dL		
Phos	3.2 mg/dL		
Mg	2.1 mg/dL		

## Answer Key

### 1. *H. pylori* infection

- Remove contributing lifestyle factors – alcohol, tobacco, stress
- Clarithromycin-based triple therapy counseling points:
  - Complete full 14 day course of therapy
  - Amoxicillin
    - Take with food to mitigate possible GI side effects (nausea, vomiting, diarrhea)
    - Administer at least 8-12 hours apart
    - Concurrent treatment with allopurinol may increase chance of skin rash
  - Clarithromycin
    - May be taken with or without food
    - Administer at least 8-12 hours apart
    - Possible side effects may include nausea, vomiting, diarrhea, metallic taste, QT prolongation
  - Omeprazole (or other PPI)
    - Take at least 30 minutes before a meal with a full glass of water
    - Swallow whole; do not crush or chew
    - May cause headache or abdominal pain

### 2. Depression and anxiety

- Duloxetine counseling points
  - Report worsening depression, suicidal ideation, or unusual changes in behavior
  - Avoid alcohol while taking this medication
  - Possible side effects may include nausea, dry mouth, constipation, decreased appetite, hyperhidrosis, urinary retention, and orthostatic hypotension
  - If a dose is missed, skip it and return to normal dosing schedule
  - Avoid sudden discontinuation to prevent withdrawal symptoms
- Recommend cognitive behavioral therapy (CBT) with pharmacotherapy for added benefit
  - Stress management
  - Meditation
  - Exercise
  - Avoid stimulants (e.g. caffeine, nicotine). Limiting caffeine intake may help reduce symptoms of anxiety.
  - Avoid alcohol consumption because this increases the risk of drug interactions and is associated with high rates of abuse.

### 3. Fibromyalgia

- Duloxetine is also indicated for fibromyalgia
- Pregabalin counseling points:
  - May cause drowsiness; use caution while operating machinery or when mental alertness is required
  - Avoid alcohol while taking this medication
  - Do not abruptly discontinue therapy; dose should be tapered over one week
  - Store in a cool, dry place away from sunlight and children

- Report unexplained muscle pain, tenderness, or weakness—especially if accompanied by fever or malaise

#### 4. Smoking cessation

- Given her history of depression and the fact that nicotine replacement therapy failed, she may want to consider discussing with her PCP about switching her antidepressant to bupropion, which is indicated for both depression and smoking cessation.
- NOTE: Pharmacist has an opportunity to recommend a plan of action, if nicotine replacement therapy (NRT) was used ineffectively:
  - NRT – Combination of topical, oral, and/or inhaled NRT strategies can be recommended to increase chances of success. Plan should include follow-up for coaching and accountability with pharmacist and/or PCP.
  - OR*
  - Pharmacologic therapy – Consider referral to PCP. Recommend using Zyban® (bupropion) 150mg QD or BID, or Chantix® (varenicline) as directed.

#### 5. Gout

- Non-pharmacological treatment
  - Diet/lifestyle/nutrition modifications – restrict alcohol, increase fluid intake, weight loss, or purine-rich foods, such as trout, codfish, mussels, anchovies, shellfish, organ meats (e.g. liver, gizzards).
  - Joint rest, ice
- Allopurinol counseling:
  - Adherence is important for preventing/minimizing gout attacks
  - Take with food or milk if GI upset occurs
  - Avoid alcohol while taking this medication
  - High fluid intake during therapy is beneficial to help prevent kidney stone formation
  - Store in a cool, dry place away from sunlight and children
  - If a dose is missed, skip it and return to normal dosing schedule

#### 6. Vaccines

- Influenza – 1 dose annually
- Tdap 1 dose + Td booster every 10 years
- Shingrix® – 2 dose-series, given 2-6 months apart
  - NOTE: Shingrix® can be given to patients who have previously received Zostavax®
- Pneumonia – 1 dose of Prevnar 13, followed by 1 dose of Pneumovax 23 after 1 year (indication: age over 65 and history of smoking)