

**CASE 8**

Level of  
Therapeutic  
Difficulty:

**1**

# Post-Myocardial Infarction; Asymptomatic Left Ventricular Dysfunction

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▼ **CASE 8 SCENARIO**

**Patient and Setting:** WS is a 48-year-old African-American male, S/P anterior wall MI; cardiac step-down unit

**Chief Complaint:** WS is concerned about long-term treatment, prognosis, and necessary lifestyle modifications

**History of Present Illness:** Admitted 5 days ago following 8 hours of crushing substernal chest pain; diagnosed with anterior wall MI. Two weeks prior to admission, history of intermittent heartburn. Cath and successful angioplasty of 100% LAD, also 50% circumflex disease. LVEF = 0.35

**Past Medical History:** Noncontributory

**Past Surgical History:** Noncontributory

**Family/Social History:** 30 packs-a-year smoker; 6 pack of beer on weekends; married, 3 children; employed as a mail package delivery driver; enrolled in HMO family plan; father died at age 52 with acute MI

**Medication History:** Medications on admission, cimetidine 200 mg po prn (OTC); current medications, etoprolol 50 mg po b.i.d.; ECASA 325 mg po qd; heparin IV

**Allergies:** Sulfa drugs (macular, erythematous rash on trunk)

**Physical Examination:**

GEN: WD, muscular, healthy appearing male

VS: T 37.3°C (Oral); BP 110/70; HR 65; RR 14; Wt 79.5 kg; Ht 175 cm

HEENT: WNL

COR: PMI 1 cm laterally displaced from the MCL with systolic lift, S3 gallop, II/VI SEM apex

CHEST: WNL

ABD: WNL

GU: Deferred

RECT: Deferred

EXT: No edema, intact pulses

NEURO: Normal, AO x 4

**Results of Pertinent Laboratory Tests, Serum Drug Concentrations, and Diagnostic Tests:**

APTT: 60 sec

LDL: 95

SCr: 0.8

Other labs: WNL

ECG: NSR, AWTMI, Q waves V1-V5

CXR: Mild cardiomegaly, no pulmonary congestion

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**CASE 8 PROBLEM LIST**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**▼ Case 8 SOAP NOTE**

**S:** \_\_\_\_\_  
\_\_\_\_\_  
**O:** \_\_\_\_\_  
\_\_\_\_\_

**A: Problems:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**P: Problem 1:** \_\_\_\_\_

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**Problem 2:** \_\_\_\_\_

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**Problem 3:** \_\_\_\_\_

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- \_\_\_\_\_

CASE 8 QUESTIONS

1. Which of the following ACE inhibitors is contraindicated in this patient? (EO-7,8,10)

- a) Benazepril
- b) Captopril
- c) Lisinopril
- d) Moexipril

2. Which lifestyle change/modification is needed for WS's coronary discharge planning? (EO-4,14,15)

- a) Weight control
- b) Smoking cessation
- c) Alter dietary intake to decrease potassium, calcium, and magnesium
- d) Resume normal physical activity

3. Which of the following classes of antihypertensive medications is commonly combined with an ACE inhibitor to enhance its effects? (EO-8,9)

- a) Diuretics
- b) Angiotensin receptor blockers
- c) Beta-blockers
- d) Selective alpha blockers

4. Which factor is least important in selecting a treatment regimen for heart failure? (EO-4,8,12,15,17)

- a) Cost of medication
- b) Access to medication
- c) Gender
- d) Patient compliance

5. Relative to the ACE inhibitors, which of the following is the least important clinical outcome for WS? (EO-8,12)

- a) Lipid lowering
- b) Decreased risk of recurrent MI
- c) Improved survival
- d) Decreased development of symptomatic CHF

6. Which of the following factors does not impact/influence the dosing of an ACE inhibitor in hypertension and congestive heart failure? (EO-7,8,9,11,15)

- a) Hepatic function
- b) Pulmonary function
- c) Renal function
- d) Drug-food interaction

7. Which of the following is indicated for asymptomatic left ventricular dysfunction following an MI? (EO-1,2,5,8,11)

- a) ACE inhibitor
- b) Warfarin
- c) Calcium channel blocker
- d) Selective alpha blocker

8. Relative to therapy with ACE inhibitors, JNC-VI recommends which of the following? (EO-8,11)

- a) These drugs can be primary first-step therapy for all forms of hypertension.
- b) These drugs should replace diuretic and/or beta-blocker therapy as the first drug to use in the treatment of hypertension.
- c) These drugs are indicated when compelling indications exist for their use, such as in congestive heart failure or when proteinuria is present in a patient with diabetes mellitus.
- d) First-step therapy should always be a combination of a diuretic and an ACE inhibitor.

9. Which of the following is not a way WS's HMO may positively impact his disease management? (EO-8,9,11,12,13,14,15,16)

- a) Issuing treatment guidelines
- b) Encouraging lifestyle modifications
- c) Instituting a disease management program
- d) Instituting additional copayments

10. Which of the following is not a possible side effect of enalapril? (EO-10,11)

- a) Cough
- b) Muscle inflammation
- c) Angioneurotic edema
- d) Functional renal insufficiency

See test forms on page S164.