

CASE 9

Level of
Therapeutic
Difficulty:

2

Idiopathic Cardiomyopathy With Decompensated Congestive Heart Failure

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▼ **CASE 9 SCENARIO**

Patient and Setting: EW, 38-year-old white male; early readmission to ICU with pulmonary edema requiring intubation

Chief Complaint: Acute SOB, intubated by paramedics en route to ER

History of Present Illness: Recently discharged after 3 day hospitalization for newly diagnosed CHF. Evaluation revealed no coronary or valvular disease and PT was normotensive. Three days after discharge, EW experienced an increasing SOB. He called the hospital to speak with resident who admitted him previously and was notified that resident was not on duty. He continued to have increasing SOB but decided to wait until follow up. He developed worsening SOB and cyanosis, and his family called 911

Past Medical History: Noncontributory

Past Surgical History: Appendectomy, age 17

Family/Social History: FH is (-) CAD, HTN, DM; self-employed brick layer; no insurance; no history of smoking; no significant ETOH use; married, 2 children; most meals prepared at home, fatty, highly seasoned southern cuisine

Medication History: Started during recent hospitalization: furosemide 20 mg po b.i.d., digoxin 0.25 mg po qd, captopril 12.5 mg po t.i.d., KCl 20 mEq po qd

Allergies: NKDA

Physical Examination:

GEN: Sedated after intubation, diaphoretic

VS: T 37°C; P 120; BP 130/90; RR 15; Wt 5 kg over recent discharge weight; Wt 80.4 kg; Ht 175 cm

HEENT: PERRLA, endotracheal tube in place, elevated neck veins, otherwise unremarkable

COR: Prominent S3 gallop, II-III/VI systolic murmur at apex and LSB

CHEST: Rales 2/3 way up

ABD: Hepatojugular reflux, hepatomegaly

GU: Foley in place

RECT: Deferred

EXT: 2+ pre-tibial edema

NEURO: Sedated and arousable, otherwise normal

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

Na: 136

K: 3.8

Cl: 94

SGOT: 60

CO₂: 24

GLU: 180

BUN: 18

Cr: 0.06

INR: 3.8

ECG: Sinus tachycardia, nonspecific ST and T wave changes

CXR: Cardiomegaly, pulmonary edema

ECHO: Dilated LV, poor systolic function, estimated EF = 0.15

▼ Case 9 SOAP NOTE

CASE 9 PROBLEM LIST

S: _____

1. _____

O: _____

2. _____

3. _____

4. _____

A: Problems:

1. _____

2. _____

3. _____

4. _____

P: Problem 1: _____

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Problem 2: _____

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Problem 3: _____

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Problem 4: _____

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CASE 9 QUESTIONS

1. Which of the following is not a pharmacoeconomic consideration in relation to EW's plan of care? (EO-8,15,17)

- a) Cost of prescription and OTC medications
- b) Quality of life
- c) Shortness of breath and suffering
- d) Limited financial resources

2. An important pharmacokinetic consideration in the selection of an ACE inhibitor for treating hypertension is: (EO-4,6)

- a) Trough-to-peak ratio
- b) Onset of action
- c) Blood pressure lowering effect
- d) Dosage range

3. Factors for which EW should be monitored that would predispose him to digoxin toxicity include: (EO-4,5,6,8,18)

- a) Hypokalemia
- b) Decreased pulmonary function
- c) Creatinine clearance greater than 60 mL/min
- d) Hyponatremia

4. Which of the following OTC medications should be avoided in EW? (EO-9,13)

- a) Acetaminophen
- b) Low-dose aspirin
- c) Ibuprofen
- d) Famotidine

5. Which factor is least likely to influence patient compliance? (EO-14,15)

- a) Dose frequency
- b) Cost of medication
- c) Dosage of individual agent
- d) Side effects

6. The most common causes of CHF are: (EO-1,13)

- a) Congenital and alcoholic heart disease
- b) Hypertension and coronary artery disease
- c) Lifestyle and diet
- d) Obesity and waist-hip ratio

7. Randomized clinical trials of captopril in patients with heart failure show that the oral dose associated with clinical effectiveness is: (EO-11,12)

- a) 150 mg po b.i.d.
- b) 50 mg po t.i.d.
- c) 10 mg po b.i.d.
- d) 12.5 mg po t.i.d.

8. Which of the following is not an approved indication for ACE inhibitors? (EO-8,11)

- a) Left ventricular dysfunction
- b) Congestive heart failure
- c) Hypertension
- d) Migraine

9. Which of the following humanistic outcomes is most likely to be affected by EW's treatment plan? (EO-15,16)

- a) Dietary limitations
- b) Financial status
- c) Work status
- d) Cost of therapy

10. Which of the following clinical findings does not indicate systolic dysfunction in EW? (EO-2,5)

- a) S3 gallop
- b) Pulmonary rales
- c) Lower extremity edema
- d) Hypoglycemia

See test forms on page S165.