# CDI Clinical Scenario 9

**CLINICAL DOCUMENTATION IMPROVEMENT:**

***An Introduction Into The Field of CDI***

MARSI

MEDICAL AUDIT RESOURCE SERVICES, INC.

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| | **PATIENT NAME:**<br>**PATIENT NO:**<br>**HOSPITAL NO:**<br>**PHYSICIAN:**<br>**D.O.B.** |
| **Discharge Summary** | **ADMISSION DATE:** |

DATE:

ADMISSION DATE:

DISCHARGE DATE:

PRIMARY DIAGNOSIS: Pneumonia/pneumonitis

SECONDARY DIAGNOSES:

1. Exacerbation of CHF
2. Coronary artery disease secondary to #1
3. Weakness, unable to walk
4. History of non-STEMI
5. Urinary incontinence
6. Bladder cancer

CONSULTS: None.

PROCEDURES: None.

IMAGING: Chest x-ray showing questionable infiltrate when she was initially seen in early December, then showing some cephalization of flow and a pleural effusion which has since resolved.

LABS: White count initially 11,000 when she was first seen for her pneumonia in September and started on antibiotics, that has since normalized. BNP was in the 900s when she was seen on 12/12, that had gone down to 186 on admission, went up to 319 on 12/16, and now down to 224 today. She has been hypokalemic. Hemoglobin has been normal. BUN mildly elevated likely secondary to some mild dehydration. CRP 0.62. Troponin was 0.12 on 12/12 and then down to 0.08 on 12/14 and has normalized since then.

BRIEF REVIEW OF ADMISSION: is a very pleasant 96-year-old woman who was admitted with ongoing weakness, unable to walk, elevated troponin, probable recent pneumonia and congestive heart failure. Her symptoms started several weeks prior and she presented to the emergency room on December 4th with an extremely productive cough of purulent sputum, sore throat. No fevers or chills but did not feel well. She was treated with oral antibiotics for probable pneumonia and given IM Rocephin. She continued to complain of weakness, she was unable to bear weight and her knees gave way and she came in about a week later and was noted to have a BNP in the 900-range and some cephalization of flow and was treated with some oral Lasix for congestive heart failure and she was sent home. She remained weak on 12/14. I did the cardiac

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enzymes from 12/12, noted they were elevated, and admitted her to the hospital. Of note, her BNP had come down with the oral Lasix at home. She was unable to bear weight, she complained of weakness, shortness of breath, productive cough, and she coughed up a large amount of purulent sputum while here. We opted to treat her with IV antibiotics for presumed community-acquired pneumonia along with IV Lasix and oral potassium for some congestive heart failure.

She is feeling much better today, she has regained some of her strength, but it was felt that she should either be in a nursing home or a swing bed for continued rehab. After discussion with patient and her daughter it was decided to go ahead and admit her to swing bed for some ongoing therapy in homes that she would be able to go home. She does have a history of bladder cancer, not in remission. She continues to have hematuria from that, it is basically nonresectable. She states she is coughing much less and her cough is now dry.

ON EXAM AT DISCHARGE, she appears much less weak. Her lungs are clear. Her heart is currently regular.

HER DISCHARGE MEDICATIONS will include:

1. Hydrocortisone cream
2. Metoprolol XL 25 mg daily
3. Nitro p.r.n.
4. Prinivil 2.5 daily
5. Acetaminophen
6. Aspirin 81 mg daily
7. Lotemax eyedrops
8. New tears eyedrops
9. She was on Lovenox and this will be stopped
10. Azithromycin will be continued for a total of 4 days, 250 daily
11. She was given IV Azithromycin on admission
12. Potassium chloride 20 mEq b.i.d.
13. Milk of Magnesia
14. Dulcolax
15. Will maintain her saline lock unless it infiltrates
16. Ceftriaxone was discontinued
17. She will be on Ceftin 250 b.i.d.
18. Lasix 40 b.i.d.

We will check a BMP and a BNP on Monday, 12/21.

DISCHARGE ACTIVITY will be PT and OT

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| EMERGENCY ROOM RECORD | PATIENT NAME:<br>PATIENT NO:<br>HOSPITAL NO:<br>PHYSICIAN:<br>MD<br>D.O.B.<br>DATE: |

DATE: 12/14/2015

CHIEF COMPLAINT: Short of breath, weak.

HISTORY OF PRESENT ILLNESS: Patient is a 96-year-old woman who comes in due to shortness of breath and weakness. She has had worsening symptoms over the last several weeks. She has been found to have an elevated troponin in the past and today was going to see Dr. ; called me and wanted to have her evaluated in the emergency room.

ALLERGIES TO PENICILLIN, ATORVASTATIN, LOVASTATIN, COLCHICINE, CIPROFLOXACIN, AND INDOCIN.

REGULAR MEDICATIONS include:

1. Tylenol as needed
2. Aspirin 81 mg daily
3. Lasix
4. Lisinopril
5. Lotemax ophthalmic suspension
6. Metoprolol 25 mg of the succinate formula daily
7. Nitroglycerin sublingual as needed
8. Vesicare 5 mg daily.

She is a nonsmoker. She is here with her daughter. She has been seen several times in the emergency room of late; on the 4th, the 12th, and then today.

EXAM: She is quite tired but she arouses easily to voice. Temperature 98.2, pulse is 66 and regular, respirations 20 but easy, no evidence for increased work of breathing at this time. Blood pressure 113/37, pulse ox 94% on room air. She denies any pain. She does complain of chest heaviness and shortness of breath. Her ENT exam is benign. Dry mucous membranes. Neck is supple. Lungs reveal some scattered rales in the bases, left a little bit more so than the right. No dullness to percussion. Cardiovascular: Regular rate and rhythm. Somewhat faint heart tones. Peripheral pulses are somewhat reduced. Her abdomen is soft, nontender, nondistended, no HSM, no masses. Extremities benign.

STUDIES: Chest x-ray looks about the same from previous. There may be a little bit more opacity in the left lower lobe compared to the last one. Her previous troponin was 0.12 just two days ago and now it is 0.08 so she still has some evidence for coronary syndrome. Her BNP is 186, on December 12th it was 929. Creatinine 1.67 which is only slightly up from 12/12 when it

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was 1.4. Her BUN is elevated at 30 and it was 16 two days ago. CBC is benign. Urinalysis is pending.

ECG shows normal sinus rhythm, no concerning ST or T-wave changes, 1st degree AV block.

ASSESSMENT: Elevated troponin, acute coronary syndrome.

PLAN: Patient is definitely failing. Will provide aspirin and heparin. Patient declines any transfer but she is willing to be hospitalized. I think anticoagulation is probably the least we could do for her acute coronary syndrome. Case was discussed with and she admits the patient for same. Patient remains DNR.

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| HISTORY AND PHYSICAL | **PATIENT NAME:**<br>**PATIENT NO:**<br>**HOSPITAL NO:**<br>**PHYSICIAN:**<br>**D.O.B.**<br>**DATE:** |

DATE: 12/14/2015

, is a very pleasant 96-year-old woman who was admitted today with ongoing weakness, unable to walk, elevated troponin, CHF, possible recent pneumonia. Ruth's symptoms started rather insidiously several weeks ago. Ultimately she presented to the emergency room on December 4th with extremely productive cough, sore throat, cough productive of greyish sputum. No fevers or chills, simply did not feel well. She was moderately short of breath. At that point she was diagnosed with possible pneumonia, given a shot of Rocephin IM, and was treated with Omnicef. Her daughter states that her cough improved remarkably but then she started to develop weakness as the week went on to the point that she could not bear weight and her knees gave way. She was seen in the emergency room two days ago where she was noted to have a BNP in the 900 range. Cardiac enzymes were not done at the time. Her white count had normalized and her chest x-ray showed a pleural effusion. At that point she was diagnosed with congestive heart failure and sent home on oral Lasix.

She had what appeared to be a good diuresis yesterday morning but this morning she continued to complain of ongoing weakness and being unable to bear weight. When she tried to go to the bathroom early in the morning her daughter found her lying next to the toilet weak and unable to get up. She got into the clinic for an appointment today and I suggested we check a troponin from Saturday and it was indeed elevated at 0.12. We then repeated it again today when she came to the emergency room and it was 0.08. She adamantly denies any chest pain or shortness of breath per se. She continues to feel weak. She was given IV heparin in the emergency room and sent to the floor for possible coronary syndrome. She does have a history of coronary artery disease in the past and has had a cardiac cath and stents placed. Of note, she also has a history of nephrectomy and also a history of bladder cancer that is not amenable to surgery. In fact, she had a non-STEMI in 04/2013. She is feeling better since admission, she is eating food, IV heparin stopped. She currently lives independently but her daughter has been staying with her for the past two months. has been doing cystoscopies on her but he is unable to resect any further cancer without the risk of perforating her bladder.

PAST MEDICAL HISTORY is significant as above for:

1. A non-STEMI MI
2. Chronic kidney disease
3. Urinary incontinence
4. Nephrectomy
5. Bladder cancer as mentioned above
6. Lumbar disk disease
7. Hyperlipidemia

| HISTORY AND PHYSICAL | PATIENT NAME:<br>PATIENT NO:<br>HOSPITAL NO:<br>PHYSICIAN:<br>D.O.B.<br>DATE: |
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8. Hypertension
9. Rosacea
10. Grover's disease of her skin
11. History of a GI bleed in the past

PAST SURGICAL HISTORY includes:

1. Laparotomy remotely
2. Arthroscopy of her left knee in 1995
3. Patellar bursectomy in 1995
4. Appendectomy in 2003
5. Multiple cystourethroscopies with excision of bladder of cancer
6. Nephrectomy on the right

CURRENT MEDICATIONS:

1. Metoprolol XL 25 mg daily
2. Lasix 40 mg daily
3. Norvasc 5 mg daily
4. Nitrostat
5. Westcort
6. Vesicare 5 mg daily which is held
7. Lotemax 0.5%, one drop to each eye daily
8. New Tears 1%, one drop to each eye daily
9. Aspirin 81 daily
10. Fish oil

HEALTH HABITS: She quit smoking years ago, does not drink any alcohol.

SOCIAL HISTORY: She lives with her daughter currently. Does have a history of blood transfusion in 2001 for a GI bleed.

FAMILY HISTORY: Mother had congestive heart failure, father had an MI. Daughter had brain cancer.

IMMUNIZATIONS: Current on her pneumonia shots, both Prevnar 13 and Pneumovax. Current on tetanus but due. Current on influenza.

REVIEW OF SYSTEMS: Currently denies any headaches. No fevers or chills. Really denies any shortness of breath, chest pain. Cough is resolved. No dysphagia, change in her bowel or bladder habits, although she did have some urinary frequency. She has not

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had a lot of urine out. Complains of being very weak in the knees but able to move them equally.

ON EXAM, she does not appear in any acute distress. Her vital signs reveal a blood pressure of 130/45, respirations 18, pulse 66, temperature 98.1, O2 sat 94% on room air. HEENT: Pupils react equally, mucous membranes are dry. She does complain of being mildly thirsty. No cervical or supraclavicular lymphadenopathy, no thyromegaly, no carotid bruits. Her lungs are clear to auscultation. Her heart is regular without murmurs, rubs, or gallops. Her abdomen is soft, she is distended in the lower abdomen consistent with a possible enlarged bladder. We will bladder scan her to ensure there is no urinary retention. She is slightly tender there, otherwise unremarkable. She moves all extremities well. She is quite thin, no edema.

LABS done in the ER includes a glucose of 128, BUN of 30, troponin 0.08 and two days ago was 0.12. BNP 187 with the previous being in the 900s. Creatinine 1.67. CBC normal.

Chest x-ray showing a pleural effusion and some cephalization of flow.

ASSESSMENT: 96-year-old woman

1. Admitted with profound weakness, unable to bear weight secondary to weakness. Likely a combination of recent pneumonia, congestive heart failure, and possible acute coronary syndrome, although her elevated troponin is likely related to her CHF.
2. Bladder cancer, nonresectable; how that plays a part in this is unclear
3. History of non-STEMI MI

PLAN: We are going to admit her. She was started on IV heparin but that was discontinued. PT/OT to see in the morning. Follow labs. Serial troponin, CPK, tonight and tomorrow. Consider IV fluids based on how she responds tonight. We are not giving any further Lasix until I see her tomorrow. We will do a bladder scan and continue telemetry.

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12/17/15 08:47

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DATE: 12/15/2015

She does not feel much better. She states her harsh cough has returned. In putting her symptoms together, I think perhaps she might have had a mild pneumonitis, went into heart failure, had a mild bump in her cardiac enzymes which may have been related to an acute coronary event or just her congestive heart failure. Otherwise, she continues to cough, feel weak, and has a difficult time walking without assistance.

ON EXAM, she appears much more lethargic than she usually does. Her vital signs: Blood pressure 124/45, respirations 16, pulse 72, she is afebrile, her weight is up from previous about 4-5 pounds, may be a different scale. Her lungs reveal some crackles in the bases. Her heart is regular. No peripheral edema.

LABS reveal a normal white count and hemoglobin, relatively unremarkable. Her creatinine has come down. CRP minimally elevated.

ASSESSMENT: Possible pneumonitis with congestive heart failure and a coronary event, may be related to congestive heart failure or ischemia.

PLAN: At this point I am going to add Rocephin and Zithromax to treat her for full pneumonia treatment to see if this will help improve her symptoms. We will give her IV Lasix and some oral potassium. We will check her chest x-ray today. Check labs tomorrow - BNP, BMP and CBC in the morning. Lovenox added for DVT prophylaxis.

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DATE: 12/16/2015

Ruth states she is stronger, feeling better, ambulating better with assistance. Physical therapy, occupational therapy involved. I did give her Lasix IV yesterday. Her BNP went up from 180s on admission to the 300-range this morning. Potassium has stayed stable. Her chest x-ray shows marked improvement in regards to cardiovascular congestion as well as the pleural effusion. She did cough up large, yellow, thick sputum so I question whether or not there may be an infectious etiology that has triggered some heart failure. Nonetheless, she seems to be improving and probably would benefit from swing bed as well. Her weight is down some from admission.

CURRENT VITALS: Blood pressure 157/77, weight 116 pounds whereas yesterday she was 119, O2 sat 94% on room air, pulse 70. No chest pain, shortness of breath improved. Lungs sound clear to me although the RN taking care of her thought she heard some rales. Her heart is regular without murmurs. No peripheral edema.

LAB reveals a BUN of 27, creatinine of 1.37, sodium and potassium normal. CBC remains normal. BNP up slightly from her admission at 319, previous 186.

Chest x-ray shows resolution of pleural effusion and marked improvement in resolution of her pulmonary congestion.

ASSESSMENT: Probable pneumonitis/pneumonia triggering congestive heart failure and perhaps some coronary ischemia, improving with improved strength.

PLAN: Continue with another day of IV Rocephin, p.o. Zithromax, IV Lasix, oral potassium. She is on lisinopril. Would anticipate swing bed hopefully tomorrow for ongoing conditioning. Her goal I believe would be to return home.

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