Milestone Two: Patient History Review

Pathophysiology and Pharmacology

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Patient Chart Review

Summary

The patient, who is in her 60s, is a white female who has been in good health in the recent past until she started to experience some respiratory infection with a cough, chills that were recurrent, sweats, fever. She tried to work and was unable to because she had difficulty breathing and an extremely high fever. Her temperature went to 102. Abdominal x-ray results showed pneumonia, and it was felt that she should be admitted for further evaluation and treatment.

Past medical history

The patient has had some alcohol problems and a history of gastritis due to excessive alcohol intake. She had a fractured wrist last year, which was potentially a secondary injury due to alcohol intake. The patient had been suffering from arteriosclerotic cardiovascular problems and had been put on Lanoxin and Lasix. She also experienced mild angina. After her second admission, she referred to General Hospital to further evaluate and treat her abnormal liver function studies. At that time, the determination that was made is that she did not have an active process.

Family history:

The patient had a history of alcoholism and cardiovascular disease on the mother and father's side, respectively. The patient also has a brother who had a heart attack related to coronary artery disease.

Social history

The patient is working as a nurse's aide. She smokes moderately. Even though she denies being a heavy drinker, we are not entirely sure about that.

The patient is back to the doctor's office complaining of symptoms in the upper respiratory system, coughing, and had chills, fever, and sweats. The patient had a fever of 102. Other systems showed that the patient had a cough which was hacking, slight dyspnea on exertion, two pillow orthopnea, and no hemoptysis. She had an appetite described as fair with bowel or bladder symptomatology. The vital signs recorded a temperature of 102, pulse rate of 90, and respiration 24. She had warm, dry skin, pupils’ round, reactive and equal. Extraocular muscles were intact. The sclera was clear; the patient showed nothing to prove the possibility of any jaundice. Nose and throat were unremarkable. She had a supple neck. No nodes or thyroid abnormalities. Chest: Scattered rales and rhonchi at both mid-lung fields. Heart: Sounds were somehow at a distance with no significant murmurs heard. Abdomen: No palpable organomegaly or masses. No tenderness or bruits. Bowel sounds ordinarily active.

The patient had a history of arteriosclerotic cardiovascular problems. Atherosclerosis is one of the primary causes of cardiovascular disease (Frostegård, 2013). This includes myocardial infarction (MI), heart failure, stroke, and claudication. The damages caused by heart attack trigger an inflammatory reaction that destroys the affected tissues. The patient's history of hypokalemia could also suggest the likelihood of a heart attack. This response affects the immunity system. The patient was diagnosed with viral pneumonia in the first diagnosis; with all the patient's symptoms in the first diagnosis, I firmly believe that the first diagnosis was a misdiagnosed. Viral pneumonia is most likely to affect people with robust immune systems (Chase, 2018). Viral pneumonia is more resistant to drugs, and usually, antibiotics do not impact them. It can also be server and fetal. Viruses cause viral pneumonia.

The major causes of bacterial pneumonia are smoking, constituting significant cases, and working in an environment with a lot of pollution. Hospital settings or nursing facilities can also contribute to a substantial percentage of the cause. The patient is said to have worked in a hospital setting as a nurse's aide. To add to that, she is a smoker, which makes her vulnerable to bacterial pneumonia. The fact that she also has a history of arteriosclerotic cardiovascular problems, which weakens the immunity. Bacterial pneumonia commonly attacks people over the age of 60 and above or children of two years and below. It is also more likely to affect people with weakened immune systems. For bacterial pneumonia, there will be much more visible imaging images of fluids in the lungs than for the case of viral pneumonia. Other things to also pay keen attention to during diagnosis include heavy secretion of mucus and a high number of white blood cells.

From the analysis of the above symptoms from the first diagnosis to the second diagnosis, the patient was misdiagnosed during the patient's first visit to the hospital. All the possible pieces of evidence point out to the patient suffering from bacterial pneumonia. The high fever she was experiencing could have been a result of body foreign invader such as bacteria. Viral pneumonia is known for being resistant to antibiotics. According to the first visit, the first set of drugs did not work, but the second set of medications normalized her temperatures. Bacterial pneumonia is known to be responsive to antibiotics.

The new signs and symptoms presented by the patient showed a new variant of pneumonia. Initially, the doctors diagnosed the patient to be having viral pneumonia. But on a second visit, the doctor examined the symptoms the patient had and concluded that the patient was suffering from bacterial pneumonia. The patient has a fever with indicated substantially that the lungs of the patient were affected. The patient also had a hacking cough which is evidence of bacterial pneumonia. Bacterial pneumonia is an infection whose leading cause is bacteria; any other bacteria can cause bacterial pneumonia; however, *streptococcus* is the most common causative bacteria.

For a healthy person, the bacteria can live in you without causing any harm. But for people with low or weakened immune systems are more vulnerable to attacks. The bacteria then attack the lungs, where they infect the air sacs filling them with fluid that causes pneumonia. People who are more susceptible to bacterial pneumonia are people of 60 years and above, those recovering from surgery, those with various underlying conditions such as asthma, diabetes, and heart diseases, those who smoke, and finally, those who have viral pneumonia (DerSarkissian, 2020). High fever, low appetite, difficulty in breathing, chills that make a person shake, and sweating is just but some signs and symptoms of bacterial pneumonia.

It is, therefore, possible that the patient had viral pneumonia that developed into bacterial pneumonia. The changes of this happening, however, are so slim. The signs that were exhibited by the patient from the first visit to the hospital indicated that the patient had had bacterial pneumonia. The primary medication for bacterial pneumonia is just antibiotic treatment. The choice of drugs to be prescribed for a patient suffering from pneumonia depends on the severity of the illness, age, and underlying conditions. For this case, the patient has severe bacterial pneumonia levels and requires advanced medication to reduce the bacteria's effects on the lungs. The use of intravenous (iv) penicillin G is currently not favored because it is prone to resistance

The new potential treatment, therefore, could be the use of glucocorticoids. Even though there are warnings that the use of glucocorticoids in infection could cause harm to the response of the immune system, it is still the best choice that is to reduce the chances of local pulmonary diseases. Research shows that the use of this type of medication is highly effective and reduces the duration of hospital stay by one day (Gamache, 2020). Patients opting for this type of medication need to bear in mind that there is a risk of hyperglycemia infections. I would advise that the patient be given glucocorticoid medication considering the severity of pneumonia, the patient's age, and the fact that she smokes.

References

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