332 W14 Case Studies

Student’s Name

Institution

Date

**Patient’s background**

Knight Markie Gabriel is a thirty-eight (38) years old male. He was admitted at Memorial Manor hospital from Memorial Regional hospital under critical condition from June 6, 2019 to June 26, 2019. In the past, Knight had suffered from neurofibromatosis, htn, tracheosotomy and quadirplagia. He denied he was not feeling pain on the chest, fever, chill, nausea and vomiting. He was feeling weakness which started more than three months ago. He had visited a hospital as outpatient and booked for surgery. According to his report the weakness worsened and when he spoke to APR with neurosurgery he was advised to go for the ED. It is therefore, evident that Knight has been feeling unwell for a while and sought for medical attention prior to his admission at Memorial Manor hospital. It is also established that Knight had been diagnosed and treated with various conditions. His health report also indicates that he has been place under lumber drain monitoring, trauma and steroid. He had also been given peg replacement. From his health report it is evident that Knight Markie Gabriel has been unwell and attending treatment prior to his admission at the ICU.

However, when his condition worsens he was taken to the hospital so that his heart rate and SOB fever could be checked. However, he was admitted to the Intensive Care Unit (ICU) and placed on empiric antibiotic for a period of time. The doctors conducted urinalysis test and the result indicates that there is high content of bacilli. The urinalysis test of the urine shows that Knight is 100, 000 CF/mL Gram negative bacilli. The urinalysis with reflex microscope indicates that the patient is Nitrite ur positive and there is presence of bacteria in the urine. The chest XR was also done and the result indicates that tracheotomy tube is in midline position.

The doctors then discovered that he has Pseudomonas and Serratia in his sputum. He completed abx before he was discharged back to the facility. Due to his condition he was placed on midodrine 10gm after every 8 hours. Moreover, the medication review of the patient indicates that Dr. English advised for his steady monitoring which means that the patient still under treatment after being release from the hospital.

**Pathophysiology of each of the disease processes**

Knight Markie Gabriel was diagnosed with pseudomonas and serratia condition. The Pseudomonas and Serratia is a disease result from urinal infection. It caused pain and weakness of the body and therefore, it is required immediate treatment.

**Risk factors**

Pseudomonas and Serratia are serious infections which can be of life threatening. It causes nosocomial infections and it makes the body become very resistance to several antibiotics and it can easily develop new resistance when expose to antimicrobial agents. It can therefore, weaken the human system of the body making the body to be prone to any disease or infection. It can also cause chronic obstructive pulmonary disease and physical disability to the victim. The long term required for the pseudomonas and serratia can lead the development of resistance bacteria by the body. According to Kirschke, Jones, Craig, Mayernick, Patel, & Schaffner (2013), people who have suffered from pseudomonas and serratia have weak human system and therefore, they can easily be infected by other diseases. This makes it one of the dangerous infections which require immediately treatment to protect an individual from further infection by other bacteria or viruses. The age is also identified as one of the risk factors of Pseudomonas and Serratia. It is established that people aged 86 years are more likely to be diagnosed with the disease. Indwelling devices and chronic obstructive pulmonary disease are also some of the risk factors. Indwelling devices are related to vascular access devices, tracheostomies, feeding tubes, endotracheal tube and wound drains. These devices are used for various medical activities in the body to provide treatment for various conditions. A study conducted by Ghibu, Miftode, Teodor, Bejan, & Dorobăţ (2010) established that these devices can result to pseudomonas and serratia infection. The infection is developed due to poor hygiene of the wounds and other parts where the devices are used for treatment. It is therefore, important to ensure that proper hygiene is provided when indwelling devices are used to provide treatment.

**Risk factor Patient experienced**

**Pseudomonas and Serratia**

It is established that Knight Markie Gabriel had suffered from trauma and given steroid. It is likely that the exposed to steroid which is known as hormone is also of the issues which Knight to be prone to infection by pseudomonas and Serratia (Bergin, Phillips, Chan, Ruedy, & Crichton, 2015). Knight also had experienced chronic respiratory failure. Knight had been exposed to indwelling devices as well when he was in the ICU for a period of time. It is pointed that Knight was placed in ICU prior his admission at the hospital and it is likely that the patient was exposed to infection during the process.

**Neurofibromatosis**

Knight experienced pain and fever which are some of the common symptoms of neurofibromatosis. Neurofibromatosis can be inherited from parents or it can be obtained like any other diseases. It is evident that Knight has been having constant symptoms and been treated for neurofibromatosis symptoms for several years. It is more likely that Knight inherited the neurofibromatosis from parents. It is established that Knight had been admitted for lumbar drain monitoring and cleft palate repair and he had intradural spine tumor.

**Assessment Finding**

**Neurofibromatosis**

Patients suffering from neurofibromatosis are expected to have tiny bumps, leaning disability, tumor and freckling in the groin area. The assessment of Knight Markie Gabriel established that he had tumor, and freckling in the groin areas. Knight also had some flats and light brown spots on the skin which are clear signs of neurofibromatosis. These are the symptoms which are expected to be found on a patients suffering from neurofibromatosis.

**Pseudomonas and Serratia**

Pseudomonas and Serratia is one of the infection common with urine and it discovered when urinalysis is conducted. However, patient suffering from Pseudomonas and Serratia are expected to have frequent urination, fever, a lot of pain when urinating. The urinal track is expected to be infected as well. The patient is also expected to show signs of weakness. The assessment is conducted through urinalysis process. The result of the assessment should be high level of grams in the urine. The result should therefore, indicates 100, 000 CF/mL Gram negative bacilli. The patient would also be tested Nitrite ur positive to show that he or she is suffering from Pseudomonas and Serratia infections. It is therefore, advisable for proper and efficient test to be conducted in order to establish the Pseudomonas and Serratia infection even when it is still in early stages (Kanj & Sexton, 2019).

**Diagnostic testing for Pseudomonas and Serratia**

The Pseudomonas and Serratia is diagnosed using the blood sample of a patient. Doctor should take a blood of a patient then send to the laboratory for test and analysis of the presence of infection. The laboratory test is conducted to identify the type of bacterial infection. It is also conducted to determine the kind of antibiotic which are more likely to be effective in the body of the patient. According to Chen & Steele (2018), it is recommended to conduct susceptibility tests using the blood sample collected from the patient.

**Diagnostic testing for Neurofibromatosis**

Doctors used various methods to test for Neurofibromatosis in most hospitals. The most appropriate techniques for testing are through physical examination of the patient’s body. It is noted that one of the symptoms of Neurofibromatosis is the freckling on the groins areas and therefore, this can easily be observed physically by a doctor. However, a doctor can as well use medical history of the patient to determine whether the patient is suffering from Neurofibromatosis. In some cases, where the physical testing or diagnostic failed to provide enough evidence, genetic testing in the medical laboratory can be used to determine if a patient is suffering from Neurofibromatosis so immediate treatment to be offered.

However, in case of emergency medical attention and a patient does not have a clear medical history. It would be important to diagnose a patient using Situation, Background and Assessment (SBA) of any previous patient with similar symptoms. The situation of the patient would be established by determining the symptoms a patient is showing. If the patient indicates similar symptoms with any previous patient, similar medication procedures would be taken immediately to ensure that immediate treatment is provided to the patient. However, it would be important to check at the medical background of the patient to understand the type of treatment the patient has been receiving and the last date the patient was treated with similar condition and the types of medication provided. The current condition of the patient would then be assessed and medication provided immediately for the patient. It is essential to point that similar medical treatment would be provided to a patient with similar condition to any previous patient after assessment has been done.

# References

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