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Case Report on Pleural Effusion with Cardiac Tamponade with Small Lymphocytic Lymphoma with Insertion of Permanent Pigtail Catheter with Splenomegaly and Hepatomegaly

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ABSTRACT

Introduction: Pleural effusion is defined as a collection of fluid in the pleural cavity that is larger than normal. When 300 ml or more of fluid is present on x-rays, it can be noticed, and when 500 ml or more is present clinically, it can be detected. Cardiac tamponade is defined as the accumulation of massive volumes of pericardial fluid in the heart, resulting in abrupt heart failure. The stroke and heart outputs are both decreasing. The insertion of a pigtail catheter is a reliable and safe way to drain pleural fluid.

Lymphocytic lymphoma is lymphoid cell proliferation that is monoclonal, most of which are B-cells (70%) or T-cells (30%). It accounts for 5% of all newly diagnosed cancers but is on the rise globally. The information of the liver cells is hepatomegaly. The inflammation of the spleen is referred to as splenomegaly.

Clinical Findings: my patient a 25-year-old male came to Acharya Vinoba bhave hospital sawangi meghe, wardha having clinical findings are as follow, breathlessness as well as loss of appetite since one month, swelling over left supra clavicular region since 10 months and cough occasional and mucoid expertarate since one and half month.

Diagnostic Evaluation: USG for mild hepatomegaly in the liver and splenomegaly in the spleen, USG for a large pleural effusion on the right side of the thorax, ECG QS complexes in V1, V2, V3, 2 D Echo ejection fraction 15%, all chambers dilated, poor biventricular systolic function, mild mitral regurgitation, tricuspid regurgitation

Outcome: A pleural tap was performed. The patient's general health was deteriorating, and he was short of breath.

Conclusion: This circumstance illustrates the mental effects on the affected person, as well as the caregiver and family. Patients' symptoms were relieved and the course of Lungs was slowed after receiving adequate treatment.

Key words: Cardiac tamponade, With pleural effusion, With pigtail catheter, With lymphocytic lymphoma, Hepatomegaly, Splenomegalyc

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INTRODUCTION

A parietal layer lines the inner chest wall, and a visceral layer that borders the interlobar fissures covers the lung. Pleural effusion is an abnormal collection of fluid in the pleural space. An aberrant pleural effusion usually indicates the presence of an underlying disease [1-5]. Every year, nearly 1.4 million people in the United States suffer from a pleural effusion. Pleural effusion is a collection of fluid in the pleural space that occurs as a result of another disease. It is rarely a primary disease process [6]. Only about 10-20ml of serous fluid is generally present in the pleural space. A buildup of fluids or blood in the pericardial sac puts pressure on the heart, preventing it from adequately pumping blood. Tamponade of the heart is a potentially fatal medical condition in which blood or fluids fill the space between the heart's sac and the muscle [7]. Your heart is put under a lot of stress as a result of this. The pressure prevents the heart's ventricles from fully expanding, inhibiting proper heart function. These pigtails are inserted using a Seldinger catheter-over-wire procedure, which is comparable to putting in a central venous catheter. Pigtail was the name given to the hairstyle in the mid-1700s [8]. Lymphocytic lymphoma is a monoclonal proliferation of lymphoid cells, most of which are B-cells (70%) or T-cells (30%). It accounts for 5% of all newly diagnosed cancers but is on the rise globally.

Lymphoma is a disease in which lymphocytes proliferate in distinct tissue masses [9].

Hepatosplenomegaly (HPM) is a condition in which the liver and spleen enlarge beyond their usual size due to a variety of factors. Hepatosplenomegaly is derived from the two words that make up the condition: hepatomegaly, which means swelling or enlargement of the liver, and splenomegaly, which means swelling or enlargement of the spleen [10]. Hepatosplenomegaly is derived from the two words hepatomegaly, which refers to liver swelling or enlargement, and splenomegaly, which refers to spleen swelling or enlargement. Infection, whether bacterial or viral, portal hypertension, cancers such as amyloidosis, fluid accumulation, respiratory infection, and so on are the causes of these disorders [11].

Patient History

A 25 year old male came to Acharya Vinoba bhave hospital sawangi meghe, wardha with the chief complaint of swelling over left supra clavicular region since 10 months, breathlessness since one and half month, cough and mucus expert rate since one and half month after all the investigation he is diagnosed as the pleural effusion with cardiac tamponade with pigtail catheter with the small lymphocytic lymphoma with the hepatosplenomegaly.

Past Interventions and Outcome

He was diagnosed with small lymphocytic lymphoma 10 months ago and he is taking treatment in the Acharya Vinoba bhave rural hospital Sawangi Meghe wardha. My patient has undergone therapeutic, medical intervention, he has not undergone any surgical interventions in the past. As evidenced by his caretaker and the family members.

Therapeutic Interventions

Patients treated with antibiotics, antacid, analgesic, diuretics, etc.

- ✓ Injection augmentin 1.2 mg three times a day.
- ✓ Injection metronidazole 100 ml three times a day.
- ✓ Injection pause 500 mg three times a day.
- ✓ Injection lasix 40 mg three times a day.
- ✓ Injection pantoprazole 40 mg once a day.
- ✓ Injection Omnacortil 20 mg once a day.
- ✓ Tablet limcee 500 mg once a day.
- ✓ Tablet shellac 500 mg three times a day.
- ✓ Injection Tramadol 100 mg three times a day**.**

Clinical Findings

General examination

Health Status: Unhealthy

Consciousness level: aware

Body type: slim

Absent is the order of inhaling and exhaling

Hygiene: good

General Parameter

160 height in cm

50 kilogrammes

Important criterion:

110/90 mmHg blood pressure

Afebrile (98.4o F) temperature

Pulse rate: 90 beat per minute

Breathing rate: 20 breaths per minute

Systemic examination

Respiratory system: right sided decreased breath sounds Abnormal

S1 and S2 are audible, but there is no murmur in the cardiovascular system.

Conscious and oriented, no specific neurological deficits in the central nervous system

Abdominal examination:

Hard and tender, there is the organomegaly that is inflammation of the liver and spleen.

Diagnostic assessment

On the premise of affected person records, bodily exam, Systemic examination USG and other investigations reveal different outcomes. After all investigation reports show that client having the Cardiac tamponade with lymphoma, and pleural effusion, Chest x-ray- my patients x-ray finding show the Right fluid collection.

ECG- The patient's ECG revealed QS complexes in V1, V2, V3, 2 D echo ejection fraction 15%, all chambers dilated, poor biventricular systolic function, mild mitral regurgitation, tricuspid valve regurgitation, and poor biventricular systolic function.

USG Abdomen-Dilated inferior vena cava, liver parenchymal disease, moderate ascites, and bilateral pleural effusion on abdominal USG. USG for mild hepatomegaly and splenomegaly in the liver, as well as a substantial pleural effusion on the right side of the thorax.

CECT Abdomen- Hepatosplenomegaly, right side pleural effusion, underlying lung collapse, and cardiac tamponade.

Fluid cytology- Smear are cellular and show mesothelial cell proliferation, lymphocytes with few neutrophils. Growth of staphylococcus haemolyticus. Sputum test-Negative, 2D Echocardiography- Function Normal.

CBC Investigation- HB-13, WBC COUNT-15600(Increase) Total Platelets Count-2.28

Lymphocytes-40%

Lipid Profile- Total cholesterol- 117, Triglyceride-68, HDL-31, LDL-73, VLDL-14

DISCUSSION

A 25-year-old male patient was hospitalised to Wardha's Acharya Vinoba Bhave Rural Hospital Sawangi (Meghe). Since 10 months, the main complaint has been swelling over the left supraclavicular region, dyspnea for one and a half months, lack of appetite for 2-3 months, cough and mucus expertarate for one and a half months. After all the investigation he is diagnosed as the pleural effusion with cardiac tamponade with insertion of permanent pigtail catheter with the lymphoma with Hepatosplenomegaly. Now he is undergoing the therapeutic treatment now the patient prognosis is better as per patient caretaker and the family members.

CONCLUSION

Pleural effusion, or an abnormal accumulation of fluid in the pleural space, is a rather common occurrence. According to US registration statistics, between 400 000 and 500 000 people in Germany are projected to be affected by this disease each year (precise German figures are unavailable). It can be caused by anything from mild effusions caused by viral pleuritis to prognostically significant effusions caused by congestive heart failure or cancer. Patients with a non-malignant pleural effusion had a one-year mortality rate ranging from 25% to 57 percent. The need to treat a pleural effusion, as well as the treatment options available, is primarily driven by the cause, which must be diagnosed precisely in each case. The use of a pigtail catheter to drain pleural fluid is a dependable and safe method. Except for empyema and other loculated pleural effusions, which have a low success rate, we recommend it for all pleural effusions needing chest drain. Future research is needed to compare the use of the Seldinger procedure with pigtail catheters and other small bore drains. Cardiac tamponade is a medical emergency that requires immediate removal of the pericardial fluid. Pericardiocentesis is the most usual procedure for this. To drain the fluid, a needle and a long thin tube (a catheter) are utilised. Hepatosplenomegaly is the inflammation of the liver and spleen, and cardiac tamponade is the collection of fluid in the pericardial region for which adequate medical therapy is given to the patient. This brings us to the topic's conclusion.

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