



“A CASE REPORT: HODGKIN’S LYMPHOMA PRESENTING AS CHYLOTHORAX.”

Medicine

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ABSTRACT

Hodgkin’s lymphoma without any specification of subtype is responsible for only 1.4% of chylothorax. The term chylothorax mean presence of chyle (lymphatic fluid) in pleural space secondary to leakage from thoracic duct or one of its main tributaries. Most common cause of chylothorax are surgery and trauma followed by malignancy. Lymphoma is most common malignancy and Non Hodgkin’s lymphoma is usual type reported to cause chylothorax. Here we present an unusual case of Hodgkin’s lymphoma presenting as chylothorax in young male on basis of CECT thorax with abdomen and peripheral lymph node biopsy.

KEYWORDS

Hodgkin’s lymphoma, chylothorax, CT Scan, Biopsy.

INTRODUCTION

Chylothorax is the presence of Chyle in the pleural space, secondary to leakage from thoracic duct or one of its main tributaries. The most common cause are thoracic trauma of surgical or non surgical origin, malignancy (most commonly lymphoma), and some infections including tuberculosis. The most common symptoms are dyspnoea and orthopnoea due to space occupying fluid in thoracic cavity. Here we present an unusual case of Hodgkin’s lymphoma presenting as chylothorax in young male on basis of CECT thorax with abdomen and peripheral lymph node biopsy.

CASE REPORT

A 38 year old male, Non smoker, admitted to the department of pulmonary medicine for complaining of dyspnea on exertion since 4 month and dry cough, decreased appetite and weight loss since 1 month. No complain of fever or chest pain. No any past history of trauma and thoracic surgery. Patient was physically active and stable. Patient does not have any comorbidities

EXAMINATION

Patient was thin, afebrile with normal pulse 74/min, BP-118/78mm Hg, RR-18/min and maintaining SpO2 97% on Room Air. Auscultatory finding suggestive of decrease air entry on bilateral lower zone. On percussion dull note on bilateral lower zone. On general examination bilateral supraclavicular and axillary lymph node palpable which are firm, non tender, discrete, and rubbery in consistency. The largest being 3x2 cm. Digital clubbing not present.

INVESTIGATION

Haematological examinations revealed a haemoglobin of 13.4gm/dl, TLC-15300/cumm with neutrophilia and normal platelet count. other investigations RFT, LFT and coagulation profile were normal. Pleural effusion on both side was detected on chest radiograph. Ultrasonography of chest shows bilateral moderate pleural effusion with echos. Pleural fluid aspirated from left hemithorax revealed milky white fluid. Analysis of pleural fluid showed 250 cells with a differential count of 30% polymorphs and 70% lymphocytes. The pleural fluid sugar level was 106 mg/ dl and protein level were 4.8 gm/dl. The Adenosine Deaminase (ADA) level in the pleural fluid was 29.52 U/L (Units/litre). Pleural fluid cytology was negative for malignant cells and did not show any organisms either. Pleural fluid cholesterol 19 gm% and triglyceride 925 mg% and sterile on culture. Total pleural fluid drain 900ml. CECT neck and thorax showed : Multiple enlarged homogeneously enhancing nodes are seen in bilateral upper, mid and lower jugular region and bilateral supraclavicular region largest one 34 x 14 mm.

Ill defined soft tissue density enhancing lesion of size 94 x 62x 61 mm is noted involving anterior superior mediastinum. Multiple enlarge homogeneously enhancing nodal lesions are seen in bilateral axillary region largest one measures approx 34 X 24 mm. Bilateral moderate pleural effusion noted. No evidence of retroperitoneal or inguino femoral lymphadenopathy.

Biopsy from axillary lymphnode and supraclavicular lymph node reveals lymphoproliferative lesion – Hodgkins Lymphoma.



Figure-1: Chest X-ray PA view show B/L Pleural effusion.



Figure -2: Aspirated “milky white” Pleural fluid.



Figure-3 CT scan of thorax (CECT) images shows a mediastinal and subcarinal enlarge lymph node with B/L moderate pleural effusion.

DISCUSSION

Chylothorax was first described by Bartolet in 1633 and by 1944 only 105 cases has been recorded. Chylothorax is the presence of Chyle in the pleural space, secondary to leakage from thoracic duct or one of its main tributaries. Chyle (from latin word chylus or juice) consists of chylomicrons and very low density lipoproteins absorbed from the small intestine secreted into intestinal lymphatics and moved into cisterna are chyli and then to thoracic duct.

The most common symptoms are dyspnoea and orthopnoea due to space occupying fluid in thoracic cavity. Pleuritic chest pain and fever are rare because is not irritating to pleura. The main threat to life from chylothorax is malnutrition and immunodeficient state as thoracic duct carries 2500 ml of fluid daily that contains substantial amount of protein, fat, electrolytes and lymphocytes the patient can become cachectic rapidly.

Most common cause of chylothorax are surgery and trauma followed by malignancy. Lymphoma is the most common malignancy and non Hodgkin’s lymphoma is the usual type reported to causes chylothorax.

Hodgkin's lymphoma without any specification of subtype is responsible for only 1.4 % of chylothoraces.

The best way to establish the diagnosis of chylothorax is by measuring the triglyceride and cholesterol levels in pleural fluid. If pleural fluid triglyceride level is above 110 mg/dl and ratio of pleural fluid to serum cholesterol is less than 1.0 the diagnosis of chylothorax is established. Also the demonstration of chylomicrons in the pleural fluid by lipoprotein analysis establishes the diagnosis of chylothorax.

CONCLUSION

When lymphoma is suspected in case of non traumatic chylothorax, CECT thorax with abdomen is important as non invasive diagnostic tool for early diagnosis and timely intervention along with biopsy of peripheral lymph node.

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