

Long Standing Hemothorax after Old Trauma: A Case Report

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Abstract

Case Report

Injuries of thoracic cavity are not common in children, but nonetheless Hemothorax remains the most common of them with about 29% of cases. And it usually presents acutely with history of trauma. In this case report, a young 5 year old girl comes in a picture of anemia and failure to thrive secondary to a long standing Hemothorax.

Keywords: hemothorax, thoracic injury, anemia, failure to thrive, truma.

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INTRODUCTION

A failure to thrive child is a term referred to any entity with physical growth severely less than of his peers. Decrease in calories intake will make the child in risk of multiple complications including vitamin/mineral deficiency, developmental delay, and Anaemia. Today we report a case of a malnourished child with insignificant history of trauma led her to present with Haemothorax.

CASE REPRESENTATION

This is a 5 years old female child, who is not known to have any medical illness referred from the Emergency department as a case of chronic cough with decrease activity since two months back, the history starts with an incident of accidental trauma when her morbidly obese 3 year old cousin sat on her upper chest area by mistake, since then the child started to have a cough episode and on the next day presented to a rural hospital where they live, diagnosed with Lobar pneumonia, treated for 7-days with Intravenous antibiotics before discharged home, her symptoms persisted at home and were also associated now with shortness of breath with movement and pain during inspiration, her family presented her to another hospital who gave them similar diagnoses and treatment and sent the patient back home. Now the patient is two months since she started her symptoms and they didn't give any history of fever, productive cough or sever respiratory distress during the said time interval.

On examination the patient looked pale, failure to thrive with weight below the 3rd percentile, she was laying on the bed comfortably on Room air with no increase in work of breathing. Vitally she was Tachycardic, other parameters including Temperature, Blood pressure, Respiratory rate all within normal range. Chest examination inspection revealed asymmetrical chest rise, but there was no apparent deformity or bruises. Palpation was significant for tenderness over the left chest with point of extreme tenderness at the 4th and 5th intercostal space, percussion showing dullness at the base of the left lung. Finally, auscultation revealed decrease air entry in the apex of the left lung and diminished chest sound at the base.

Patient was sent for Chest Xray (Figure A) which was in line with left lower lobe consolidation, which was inclusive findings, so we sent him for CT-Chest (Figure B and C) and had Heterogenous lobar consolidation in the left lower lobe with mixed density and Alveolar haemorrhage.

Patient was admitted for observation, pediatric thoracic surgery were consulted and they recommended no surgical intervention is necessary for old traumatic Haemothorax, blood labs were taken patient high CRP, ESR and microcytic hypochromic anaemia, after that Iron studies were obtained showing low Iron and Transferrin levels, So the patient was discharged 3 days later on a good condition on Iron supplements, and Oral antibiotics.

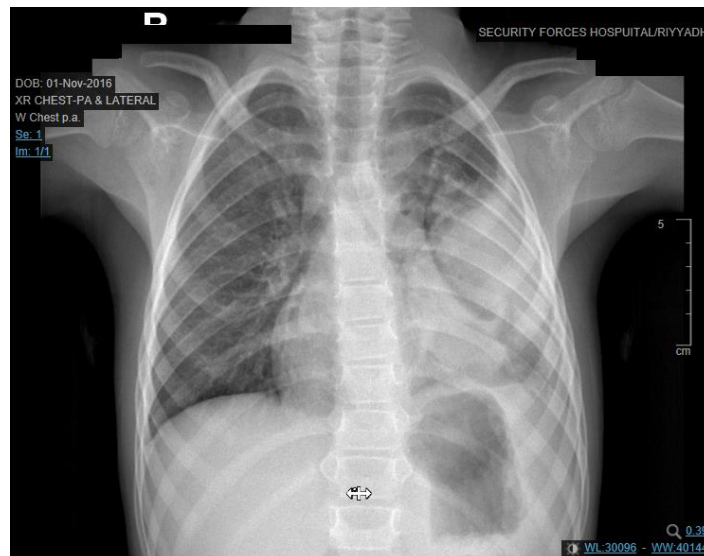


Figure A: XRAY-CHEST PA: Left Lower lobe consolidation

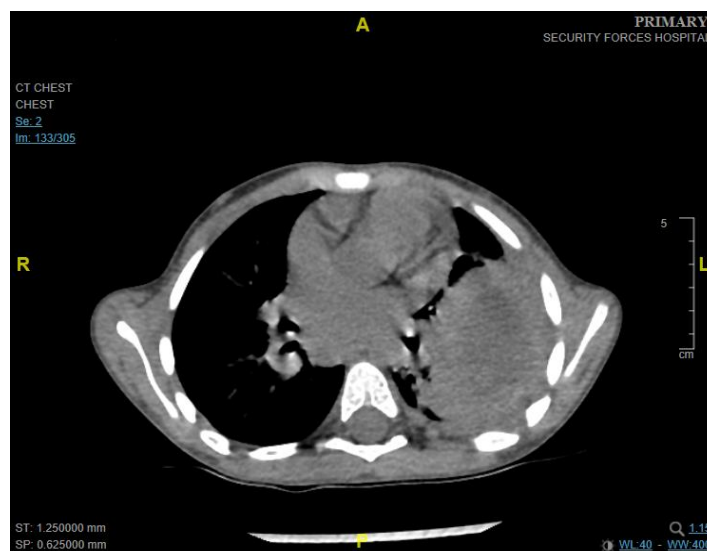


Figure B: CT-CHEST: Haematocrit level indicating hematoma and alveolar haemorrhage

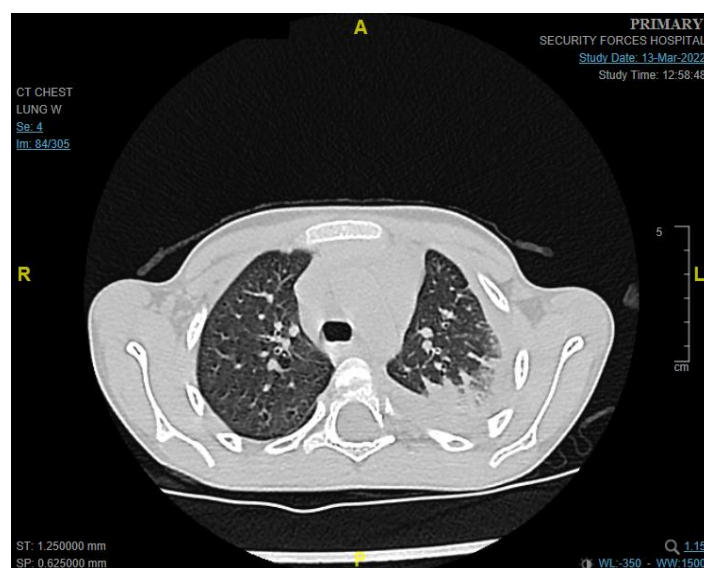


Figure C: CT-CHEST LUNG WINDOW: Lobar consolidation in the left lower lobe with heterogeneous density, small left pleural effusion is noted. Consolidation with air bronchogram is noted next. The right lung is unremarkable

DISCUSSION

Although injuries of Thoracic cavity are not common in children, it remains a major cause for morbidity and mortality among pediatric age group. Multiple factors put pediatric patient in danger of complications including the anatomic difference in comparison with adults, the incomplete bony ossification and finally the less soft tissue mass. Physiological difference with adults also can raise the chance of morbidity and mortality including higher metabolic rates, larger body surface area to weight ratio and the increase in likelihood to hypoxemia, hypotension, and hypothermia [1, 2].

Hemothorax is one of the more common thoracic injuries, it makes up for about 29% of chest trauma in children, exceeded only by pulmonary contusions, rib fractures and pneumothorax which account for about 60% of chest wall traumas [3, 4].

Minor Hemothorax might present with minor symptoms or clinically asymptomatic, the best diagnostic tool would CT scan, also, Ultrasound is considered a sensitive diagnostic method. These patients who are missed to be evacuated might have increased risk of Empyema and restrictive lung disease. Major Hemothorax will have respiratory distress and absent breath sounds, however they will have dullness to percussion. They may also present in hypovolemic shock, transfusion of blood is necessary in some cases, but the initial treatment for such presentation will require Tube thoracostomy to treat the respiratory distress [5-7].

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