Chilaiditi Syndrome in Trauma Patient

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Introduction: Chilaiditi Syndrome; it is a rare syndrome which occurs as a result of compression of the right hemidiaphragm and liver with a portion of the colon and/or small intestine. It is usually asymptomatic and is detected incidentally on chest X-ray. In this paper, we present a trauma case with the diagnosis of Chilaiditi Syndrome by radiological examinations.

Case Presentation: A 83-year-old male patient who was found left chest trauma after fall was admitted to the hospital for follow-up and treatment. The patient had a history of gastritis, cholecystectomy, umbilical hernia, and prostate surgery. Family history was not found. Respiratory system examination revealed pain, tenderness, crepitation and minimal subcutaneous emphysema in the left chest wall. It was learned that the patient had gastrointestinal symptoms occasionally. Abdominal examination did not show distention, defenses, rebound, or organomegaly. On the chest radiograph, left 6th rib fracture, left pneumothorax at the apex, blunt left costophrenic sinus, gas image under right hemidiaphragm were observed. In thorax CT; minimal displaced left 6th rib fracture, non-displaced left 7th rib fracture, minimal pneumothorax on the left, frosted glass areas in favor of contusion and atelectasis in the left lower lobe, and distended bowel loops at the right subdiaphragmatic location were observed. The patient, who was treated symptomatically and regressed the line of pneumothorax with oxygen, was discharged.

Conclusion: It has been reported that the incidence of Chilaiditi Syndrome is between 0.025% and 0.28%, it increases with age and it is 1% over 65 years of age. In etiopathogenesis; the subfrenic cavity is wide, congenital or acquired, prolonged or malrotation of the colon, looseness of hepatic ligaments, reduction in liver volume, and looseness of diaphragm depending on innervation or muscle structure. In this syndrome, Chilaiditi holds the liver responsible for being overly mobile. In other publications, excessive mobility of the colon has been shown as the main pathophysiological cause. Common symptoms include abdominal pain, constipation, nausea and vomiting. It may cause acute intermittent bowel obstruction. Additionally, in the literature, there is also cases of Chilaiditi Syndrome presented with cardiac arrhythmias and treated with COPD as a result of shortness of breath. It should be kept in mind as a rare cause of the differential diagnosis of dyspnea and chest pain.

Keywords: Chilaiditi syndrome, chest and abdominal pain, trauma