



Spontaneous Idiopathic Intercostal Hernia

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Abstract

Idiopathic/spontaneous abdominal Intercostal hernia is rare. Intercostal hernia is commonly associated with trauma or following thoracic surgery. Depending on aetiology, they are classified as acquired or congenital. Intercostal hernias without any aetiological factors are rare. Herewith, we present a case report of 69 years old male with spontaneous idiopathic abdominal intercostal hernia.

Keywords: *Idiopathic, abdominal, intercostal hernia.*

Introduction

Though hernia is commonly occurring disorder, intercostal hernia is rare. It is mainly associated with trauma or post surgical intervention. It is common over chest wall. Depending on aetiology, intercostal hernias are classified as acquired (traumatic, spontaneous or pathological) and congenital ⁽¹⁾. It can be associated with severe chronic cough, trauma, rib fractures, penetrating injury, surgical intervention, inadequate closure during surgery ⁽²⁾. Rarely it occurs without any aetiology. In present case, patient noticed reducible swelling over left subcostal region without any significant past and aetiological history. Intraoperatively, intercostal hernia with defect in between left 11th and 12th ribs was found.

Case Report

69 years old male presented with left sided upper abdominal swelling. He noticed it since 6 months. It was painless and gradually increased in size.

Swelling used to reduce in size on lying down and increase in size on straining or coughing. Patient had no history of trauma or surgery or intervention locally in past.

On examination, 10 x 10 cm globular swelling present in left intercostal region in anterior axillary line. It was reducible. Expansile cough impulse was present.

Ultrasonography was suggestive of lateral abdominal wall hernia.

Patient was explored under anaesthesia. Intraoperatively, hernial sac was found to be adhered with surrounding tissues (Fig 1 & 2). It was separated and found to be coming out of 11th and 12th ribs. The sac was buried locally with closure of defect. Meshplasty was done.

Postoperative course in hospital was uneventful. Patient was found to be symptom and disease free in 2 years of follow up.



Fig. 1 – Intraoperative left intercostal hernial sac



Fig. 2 – Intraoperative left intercostal defect between 11 & 12th ribs

Discussion

Intercostal hernias are rare phenomena. It is caused by a disruption or weakness in the thoraco-abdominal wall musculature resulting in herniation of fascia layers between adjacent ribs⁽²⁾. There may only be an empty sac comprised solely of fascia elements or may contain thoracic or abdominal viscera^(2,3). Intercostal hernias are classified on the basis of their etiology, with majority resulting from trauma (blunt injury, penetrating injury, rib fractures or surgical intervention)⁽²⁾. Rarely, they occur spontaneously or congenitally. Intercostal hernia of chest wall is

more common than abdominal intercostal hernia. Recently intercostal hernias have been divided into two types: with or without diaphragmatic defect⁽⁴⁾.

Abunnaja et al⁽²⁾ reported a case of acquired abdominal intercostal hernia in a 51 years old female patient with past history of stab injury locally.

Torres et al⁽⁵⁾ reported Inverted Intercostal Hernia of Soft Tissue of the Chest Wall in a 45 years old female with history of resection of the seventh rib for costal hemangioma.

Connery et al⁽⁶⁾ presented a case report of Cough-induced abdominal intercostal hernia in a 55 years old male patient who had previously fractured a rib due to severe coughing.

Khan et al⁽⁷⁾ reported a case of acquired spontaneous intercostal hernia in a 50 years old male with history of chronic cough.

In present case, 69 years old male came with left intercostal swelling which was reducible and found to be intercostal hernia between 11th and 12th ribs in anterior axillary line. Patient had no positive aetiological component causing herniation of fascial layers through ribs. it was spontaneous/ idiopathic type of intercostal hernia. It was managed successfully with local exploration with meshplasty.

Conclusion

Idiopathic abdominal intercostal hernia do occur. Detailed aetiological history is essential to know the cause. Age related weakness of musculature may be the cause behind such presentation. Such hernias also should be treated promptly as they may complicate like other types of hernias.

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