

Transdiaphragmatic Intercostal Hernia Following Blunt Trauma and Coughing: A Case Report and Literature Review

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Abstract

Background: Transdiaphragmatic intercostal hernias (TDIHs) are rare, frequently underdiagnosed conditions characterized by herniation of abdominal contents through concurrent defects in the diaphragm and intercostal musculature. They usually result from blunt or penetrating trauma but may also occur spontaneously following episodes of markedly increased intra-abdominal pressure, such as forceful coughing.

Case presentation: We present the case of a 68-year-old male with a large TDIH manifesting as a progressively enlarging left thoracoabdominal mass after blunt trauma and a severe coughing episode. The initial diagnosis was of a large hernia of the lateral abdominal wall. Diagnostic imaging revealed a significant diaphragmatic defect with herniation of the omentum and splenic flexure through the thoracic wall. Surgical repair was performed by a multidisciplinary team via a posterolateral thoracotomy with primary diaphragmatic closure and thoracic wall reconstruction. The postoperative course was uneventful, with no recurrence at six months.

Conclusion: This case highlights the importance of high clinical suspicion, advanced imaging, and collaborative surgical management in treating this rare entity. Also, a literature review is presented.

Keywords: transdiaphragmatic, intercostal hernia, trauma