

<b>Case</b>	(393) Bowel obstruction through a non diagnosed post traumatic diaphragmatic hernia: case report.
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## CASE PRESENTATION

A 73-year-old man was admitted to the emergency room complaining of abdominal pain, vomiting, distension and decreased bowel movements. Chest X-ray findings were mild elevation of the diaphragmatic contour and abnormal air at the base (inferior margin) of the left lung. Abdominal X-ray showed dilatation of large bowel with hydro aerial levels.

CT showed a diaphragmatic discontinuity with herniation of two segments of large bowel at the splenic flexure into the left hemithorax, with the collar sign and dilatation of the right and transverse colon.

The patient referred a blunt thoracic trauma six years before. CT obtained at that time showed left sided pleural effusion, pneumothorax and multiple ribs fractures. [ Reviewed retrospectively, we saw a discontinuity of left hemidiaphragm not described for radiologist. ]

The patient was operated confirming an incarcerated diaphragmatic hernia of large bowel with two levels of obstruction at the splenic flexure, and signs of partial ischemia. Subtotal colectomy was necessary with favorable subsequent evolution.

## DISCUSSION

Diaphragmatic injuries occurs in 1.1 to 8% of patients suffering from thoracicabdominal trauma and most of them are young men. The left hemidiaphragm is three times more frequent damaged than the right side.

Radiography signs include: intrathoracic herniation of a hollow viscus. Findings suggestive of rupture include elevation of the hemidiaphragm, (viewed in our case) distortion or obliteration of its outline.

CT findings include: Discontinuity of the hemidiaphragm; intrathoracic herniation of abdominal contents; the collar sign: a waistlike constriction of the herniated hollow viscus. All these signs were present in our case. And the "dependent viscera" sign: when the bowel or stomach lay in contact with the posterior left ribs.

The high frequency of associated injuries may distract us from the diaphragmatic injury and delay the diagnosis, increasing morbidity and mortality (1). If a traumatic diaphragmatic injury is not treated, the patient is at risk for organ herniation and strangulation (2). Complication with large bowel obstruction is an unusual delayed manifestation of diaphragmatic injury (3).

## CONCLUSION

Delayed herniation through a trauma-induced defect in the left hemidiaphragm can be an unsuspected cause of large bowel obstruction. Abnormalities of the left hemidiaphragmatic contour on chest X-ray suggest the diagnosis in patients who have abdominal pain with prior thoracic trauma (3).

CT confirms the diagnosis and provides accurate information about abdominal visceral organs.



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