

Rectosigmoid Compression and Colonic Distension by a Distended Bladder Mimicking Intestinal Obstruction: A Diagnostic Pitfall in A Paraplegic Spinal Cord Injury Patient

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Abstract

Case Report

We report the case of a 50-year-old man, paraplegic following a spinal cord injury six months prior, who presented with a four-day history of fecal and gas retention. Abdominopelvic CT revealed massive colonic distension caused by extrinsic compression from a distended urinary bladder, mimicking a mechanical intestinal obstruction. This case highlights the importance of considering extrinsic, particularly urological, causes of pseudo-obstructive syndromes in chronically neurologically impaired patients.

Keywords: Paraplegia, distended bladder, colonic distension, extrinsic compression, abdominal CT.

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INTRODUCTION

Bowel obstruction is a common abdominal emergency, with mechanical and functional etiologies. In paraplegic patients, functional or extrinsic causes should be prioritized. A distended urinary bladder can rarely lead to significant colonic compression, simulating mechanical obstruction. Imaging, especially abdominopelvic CT, plays a key role in identifying the underlying cause [1,2].

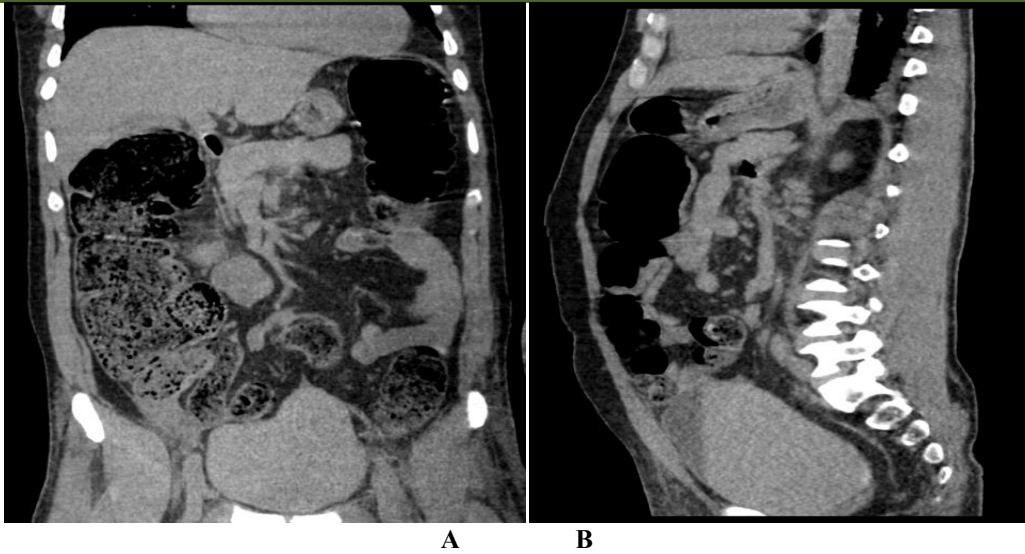
CASE REPORT

A 50-year-old male, paraplegic for six months following a road traffic accident resulting in dorsal spinal cord trauma, presented to the emergency department with a four-day history of fecal and gas retention, without vomiting or overt abdominal pain. Clinical examination

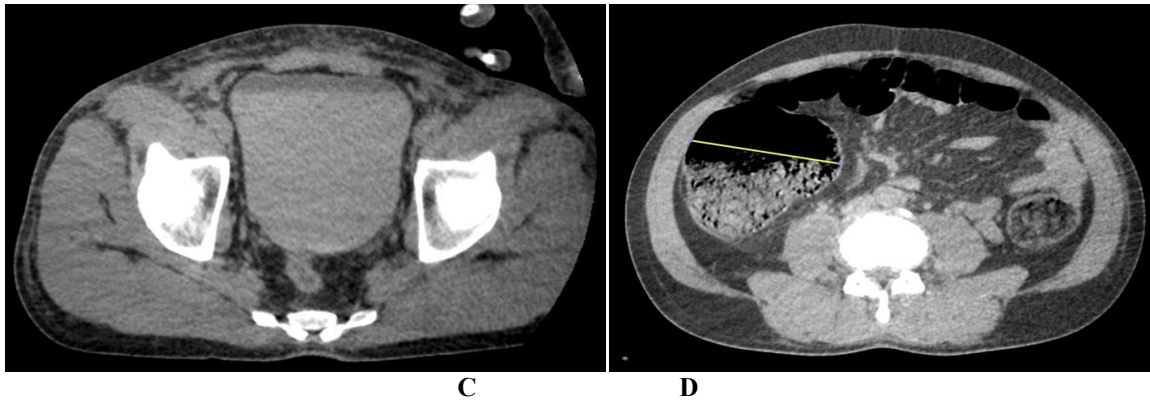
revealed a distended, tympanic abdomen without guarding or palpable mass.

An urgent contrast-enhanced CT scan of the abdomen and pelvis was performed. It showed marked colonic distension upstream of the rectosigmoid junction, a maximum diameter of 9 cm with no evidence of intraluminal obstruction or wall abnormality. The urinary bladder was massively distended, displacing the rectosigmoid colon posteriorly and superiorly, causing extrinsic compression responsible for the pseudo-obstructive pattern.

Bladder catheterization drained more than 2 liters of urine, leading to rapid resolution of the colonic distension and digestive symptoms. Clinical and radiological follow-up was favorable.



A: coronal, significant fecal stasis
B: Rectosigmoid Compression by a distended Bladder



C: The urinary bladder was massively distended
D: Colonic distension 9 cm of diameter

DISCUSSION

Bladder overdistension is a frequent complication in patients with neurogenic bladder, particularly after spinal cord injury [3]. Chronic urinary retention can lead to significant bladder enlargement, creating a mass effect on adjacent digestive structures, especially the sigmoid colon and rectum [4].

In our case, extrinsic compression by the bladder mimicked a low intestinal obstruction. Differentiating between true mechanical obstruction and extrinsic compression is crucial to avoid unnecessary surgery. Abdominal CT is the gold standard for this differential diagnosis [5].

Few cases have been reported in the literature describing pseudo-obstruction secondary to bladder distension. This unusual presentation should be recognized, especially in neurologically impaired or elderly patients [6].

CONCLUSION

This case illustrates a rare but reversible cause of bowel obstruction due to bladder distension in a paraplegic patient. Abdominal CT allows for accurate and timely diagnosis, avoiding unnecessary surgical interventions. A thorough understanding of digestive complications related to neuro-urological dysfunction is essential in the comprehensive management of spinal cord injury patients.

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