



RIDING FINE, CRASHING INSIDE: UNVEILING BOWEL INJURY POST-BLUNT TRAUMA



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INTRODUCTION

Blunt abdominal trauma from motor vehicle accidents (MVA) poses diagnostic challenges due to its diverse range of injuries and complex abdominal cavity involvement. Delayed presentations can result in serious consequences if not promptly identified and managed.

CASE REPORT

A 26-year-old gentleman presented post-car accident, attributed to microsleeping, complaining of mild right flank pain. His initial vitals were stable and he was triaged to the green zone. Physical examination revealed a 4x3cm abrasion over the right flank. Otherwise, the abdomen was soft with no tenderness or guarding. He was discharged after a normal X-ray and negative Focused Assessment using Sonography in Trauma (FAST) scan. Two days later, worsening abdominal pain prompted a return to the ER and repeat erect CXR revealed subdiaphragmatic air. Contrast-enhanced CT (CECT) abdomen showed hemopneumoperitoneum with multiple sites of bowel injury. Emergency laparotomy confirmed the findings, necessitating surgical repair and stoma creation. Post-surgery, he achieved full recovery.

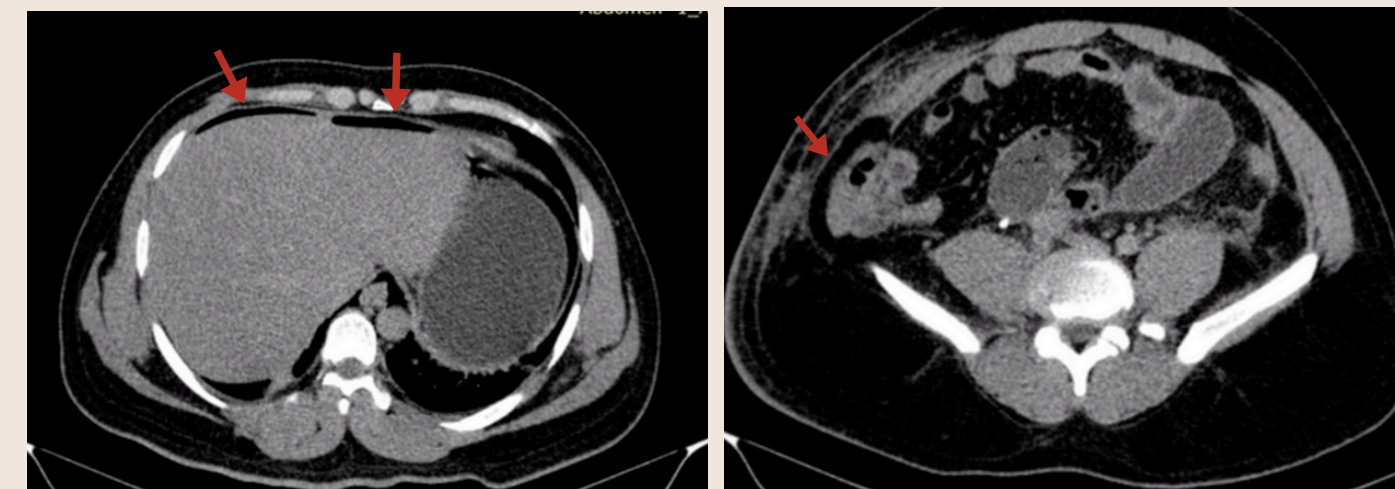
DISCUSSION

Blunt abdominal trauma presents significant diagnostic challenges especially when the initial symptoms are mild or vague. In this case, although the patient was hemodynamically stable upon initial presentation, there were subtle red flags that warranted closer attention. These included the high-impact nature of the car accident, the presence of an abrasion on the right flank, and mild but localized pain. Despite these indicators, the clinical decision to discharge the patient after negative FAST scan and normal X-ray may have been premature.

This case underscores the importance of considering ongoing clinical reassessment and the potential need for further imaging, even when initial FAST results are negative, especially in the context of persistent or worsening symptoms. Detection of small amounts of free fluid on FAST scan can be difficult, even for experienced clinicians. Due to this, a negative FAST scan, even in a clinically stable patient, should be followed by ongoing observation and repeat FAST scans within 12 to 24 hours [1]

Studies, such as those by Chiu et al., highlight the scan's limited sensitivity in detecting free fluid [2] As a result, clinicians should integrate FAST findings with a comprehensive clinical evaluation and consider additional imaging, such as CT scans, for a more complete assessment [3]

Furthermore, it is recommended to provide a referral for reassessment at an emergency department or local clinic, should the patient's abdominal pain worsens, to ensure timely and accurate management of potential injuries.



Abdominal CECT showing hemopneumoperitoneum and right lateral abdominal hernia with soft tissue hematoma

CONCLUSION

This case underscores the complexities involved in diagnosing abdominal injuries following blunt trauma, especially when initial assessments and imaging yield inconclusive or falsely reassuring. Clinicians should contemplate prolonging observation periods for trauma patients, even in the absence of initial signs pointing to severe injury. This proactive approach may improve the early detection of delayed complications, ultimately optimizing patient outcomes and diminishing the risk of post-discharge complications.

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