

The First Cut is the Deepest

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Case Report

15yo M with no significant past medical history presented to a satellite emergency room with complaints of left-sided chest and abdominal pain after experiencing a blunt force trauma during his lacrosse game that evening. The patient stated that he was body-checked (controlled forceful contact where both hands remain on the lacrosse stick) on his left side by the opposing team's player, who, per the patient, was twice his size. Since the contact, he noted 8/10 non-radiating left-sided chest and abdominal pain. Endorsed nausea.

Physical Exam

- General: Mildly uncomfortable, alert, awake, well-nourished
- Chest Wall: Physiologic motion, no flail chest
- Cardiac: RRR, S1S2
- Pulmonary: CTA b/l, no r/r/w
- Abdominal: (+)TTP over left costal margin, TTP left upper and left lower quadrant, CVA tenderness, no bruising

Differential Diagnosis

- Fractured Rib
- Rib Contusion
- Muscle Contusion
- Kidney Laceration
- Splenic Laceration

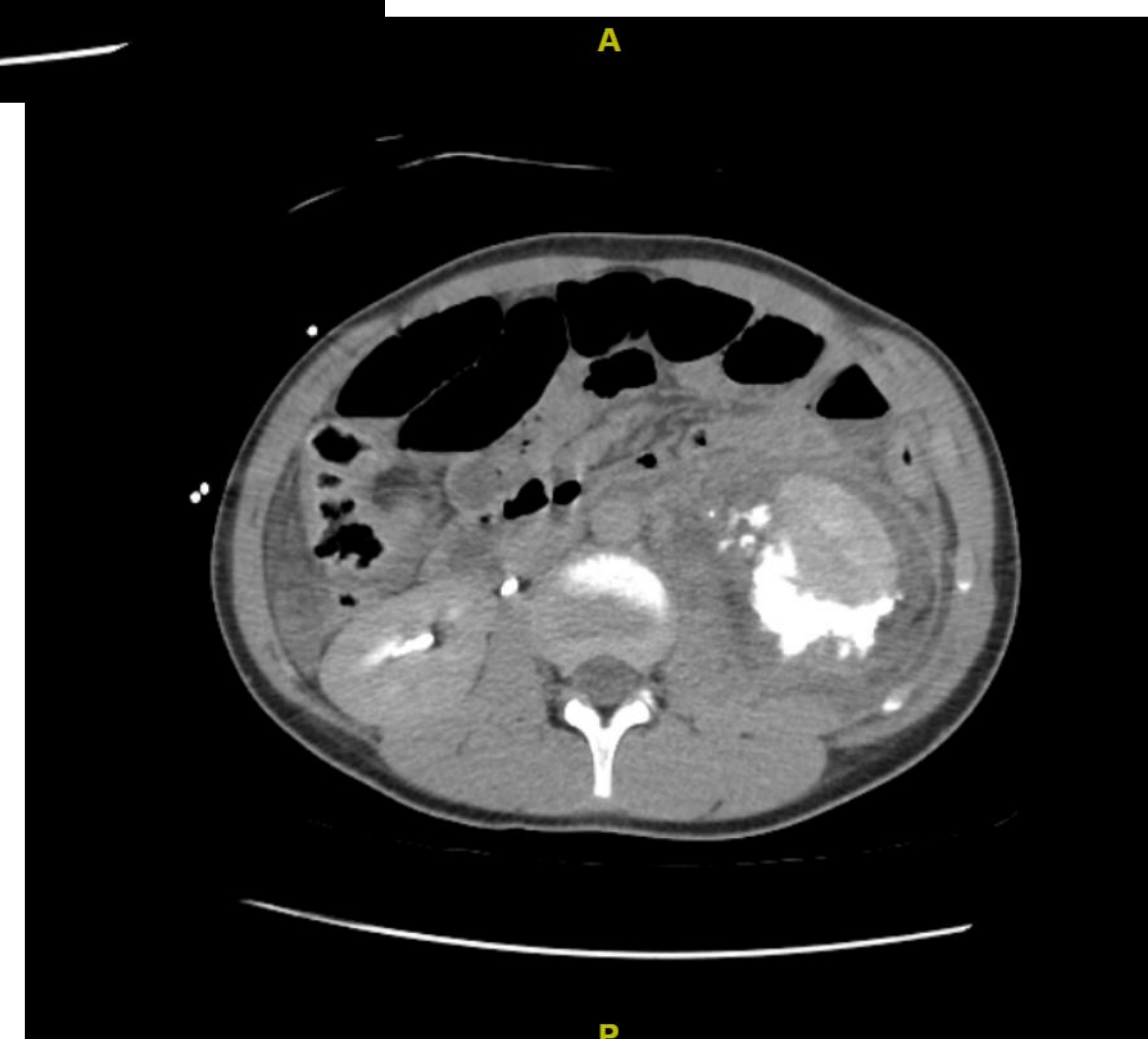
Labs

- Initial significant labs/tests:
 - WBC 14.2
 - UA: RBC >100, Blood 250 and Protein 100

Images



Initial image: Grade 4 left renal laceration with a perinephric hematoma



Two days later: Grade 4 renal laceration with urinary extravasation into the left perinephric space/retroperitoneum

Final Diagnosis and Treatment

- Diagnosis: Grade 4 Kidney Laceration with left lower urinary pole extravasation s/p ureteral stenting
- Treatment: Cystoscopy was performed and a ureteral stent was placed, which was subsequently removed one month later.

Discussion

- Abdominal trauma can be subcategorized into blunt and penetrating traumas.
- Blunt trauma, globally, comprises about 80% of all abdominal traumas and has an even higher frequency of occurrence in athletics, specifically contact and collision sports, although some non-contact sports can predispose their athlete to this type of trauma.
- It is important to recognize which athletes in which sports are more likely to experience blunt abdominal trauma.
- Blunt abdominal traumas are more difficult to evaluate than penetrating traumas and are therefore associated with higher morbidity and mortality.
- If you have any suspicion of a blunt abdominal trauma, immediate referral to an emergency room for more in-depth evaluation and diagnostic imaging is warranted and necessitated.

Return to Activity

- Avoid physical activity for the remainder of the lacrosse season, roughly 4-6 weeks.
- One month after his admission, the patient followed up with urology for removal of the stent.

References

- Escalera RPB. Chapter 22: Abdomen. In: Piedade SR, Imhoff AB, Clatworthy M, Cohen M, Espregueira-Mendes, J, eds. *The Sports Medicine Physician*. Springer; 2019:289-291.