A rare case report of large perinephric hematoma in a patient of B/L polycystic kidney disease due to trivial trauma

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Keywords
Hematoma perinephric, polycystic kidney, trivial trauma

Abstract
Large number of case reports and literature is found in cases of management of blunt kidney injuries without preexisting renal pathologies. Very scanty literature and reports are available in cases of bilateral polycystic kidney disease presenting with blunt trauma resulting in a massive hematoma with deranged renal function test. Our case was a surgical challenge where the conflict arises whether to intervene and open and drain the hematoma or do a radiological procedure to aspirate it minimally invasively. This case report serves as a good example for all clinicians who will deal with such rare cases of large perinephric hematomas in cases of bilateral adult polycystic kidney disease. The management followed in this case serves as an example and a reference for the need of operative intervention in cases of large perinephric hematomas.

Introduction
Blunt kidney injuries are 9 times more common than penetrating injuries. Such injuries usually present with vague abdominal pain with or without hematuria. The objective of this case study is to report a case of autosomal dominant polycystic kidney disease (ADPKD) incidentally found in the investigation of suspected renal injury secondary to blunt abdominal trauma.

Case Report
A 40-year-old patient came to the surgical OPD with vague flank pain. The patient gave a history of trivial trauma by a steel jar falling on his flank 8 days back. On examination, the patient had a lump of size 14 cm*6 cm in the left flank tender to palpate. Ultrasound reported a large perinephric hematoma of >800 cc in the left perinephric space with B/L polycystic kidney. A plain computed tomography abdomen pelvis was done to further confirm the diagnosis which confirmed bilateral polycystic kidney disease with the left perinephric hematoma (Figures 1 and 2). On admission, the patient had Hb - 3.0 g/dl and deranged renal function test with urea - 115 mg/dl and creatinine - 4.2 mg/dl.

Discussion
The patient had severe anemia with deranged renal function test. The patient was aggressively managed with blood transfusions, plasma transfusion to improve his coagulation profile and also hemodialysis was done to improve the renal function. Post-transfusion and dialysis patient was taken for exploratory laparotomy with Hb - 11.0 g/dl. In lateral position with kidney bridge, a flank incision was placed and more than 1000 cc of hematoma was drained (Figure 3). No active source of bleeding was noted and the cavity was closed by placing a drain inside (Figure 4). Postoperatively, the patient improved symptomatically with no bleeding episodes. Drain was removed on post-operative day 6. Over a period of 2 weeks, the patient’s renal functions came back to normal without dialysis.

Conclusion
Large number of case reports and literature is found in cases of management of blunt kidney injuries without preexisting renal pathologies. Very scanty literature and reports are available in cases of bilateral polycystic kidney disease presenting with blunt trauma.
resulting in a massive hematoma with deranged renal function test. ADPKD is usually diagnosed on routine screening when the patient presents with flank pain, hypertension, and hematuria and usually is missed or asymptomatic for many years; hence, in this case, a patient of ADPKD undiagnosed for years had blunt renal trauma presenting as such huge hematoma. Our case was a surgical challenge where the conflict arises whether to intervene and open and drain the hematoma or do a radiological procedure to aspirate it minimally invasively. In our case, the patient walked in the OPD 8 days after trauma with a Hb – 3 g/dl. After adequate resuscitation and dialysis, we decided to evacuate the hematoma as such a large old hematoma could not have been aspirated minimally invasively and would have act as a septic foci if infected. Hence, this case report serves as a good example for all clinicians who will deal with such rare cases of large perinephric hematomas in cases of bilateral adult polycystic kidney disease. The management followed in this case serves as an example and a reference for the need of operative intervention in cases of large perinephric hematomas.

References

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