Traumatic Extra Renal Rupture Of Cyst In Case Of Polycystic Renal Disease

A Agarwal, U Ray, R Mukherjee, A Banerjee, A Bora

Citation

A Agarwal, U Ray, R Mukherjee, A Banerjee, A Bora. *Traumatic Extra Renal Rupture Of Cyst In Case Of Polycystic Renal Disease*. The Internet Journal of Emergency Medicine. 2006 Volume 4 Number 1.

Abstract

Polycystic kidney disease is an autosomal dominant disease which may manifest in various forms. The traumatic rupture of cyst presents as emergency mimmiking any of the abdominal emergencies, but this has to be suspected in an undiagnosed case and thoroughly investigated before contemplating on treatment acute abdomen.

INTRODUCTION

Adult polycystic kidney disease is transmitted as an autosomal dominant trait and affects approximately 1 in 1000 people. Polycystic kidney disease usually manifests itself in the fourth decade and rupture of cysts usually occurs in the collecting system not extrarenally. [1]

CASE HISTORY

A 19 year old presented to the ER with complaints of pain in abdomen after being hit by football on the left side of abdomen.

On examination he was having tachycardia. On catheterization there was hematuria which after some time cleared off. Abdomen was soft.

Based on these findings a provisional diagnosis of renal trauma was made. A single shot IVU was done which showed spider leg deformity in right kidney which led to suspicion of polycystic kidney disease (photo1). USG was done which showed multiple cysts in both kidneys with left perinephric collection (photo2). A CECT was done which showed extravasations of contrast in the left perinephric region (photo3,4).

Figure 1

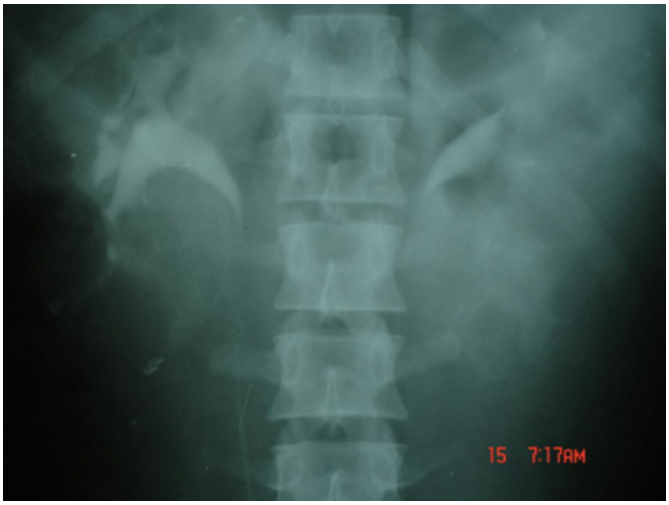


Figure 2

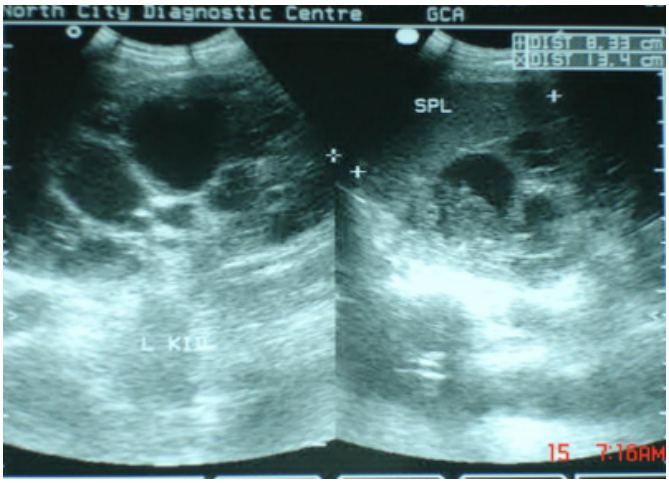


Figure 3

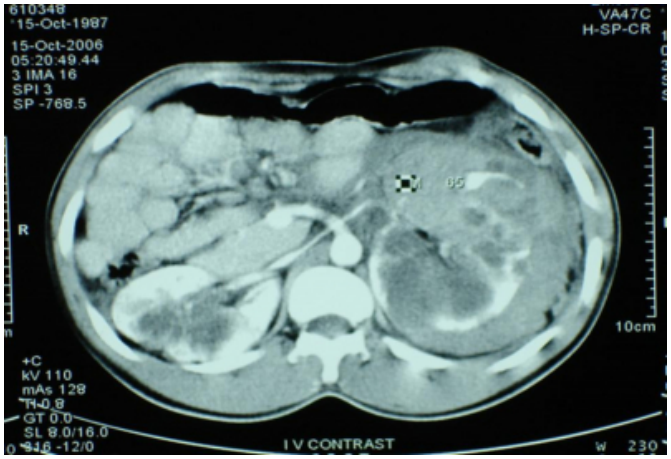
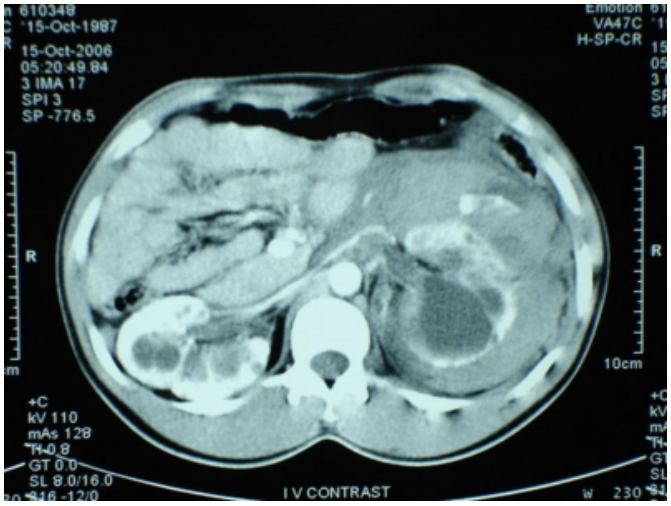


Figure 4



Thus a diagnosis of extra renal rupture of cyst in polycystic kidney was made and patient was put on conservative treatment to which he responded and was discharged 4 days later with appropriate advice.

DISCUSSION

Polycystic kidney disease is transmitted as an autosomal dominant trait caused by mutations in 3 genes: PKD1, PKD2, and PKD3. [2]

Patients present with hypertension and progressive renal failure after their third decade of life. Uncommonly, autosomal dominant polycystic kidney disease (ADPKD) appears in children, and it is rarely seen in neonates. Of patients with ADPKD, 25-50% have associated hepatic cysts, 9% have associated pancreatic cysts, and 5% have associated splenic cysts; pulmonary cysts occur uncommonly. These extrarenal manifestations are not found in neonates and children..

The symptoms are hypertension predates renal failure, Infections, hemorrhage, and renal calculus, massive intracystic or retroperitoneal hemorrhage can occur; these require nephrectomy. Approximately 10% of patients with ADPKD die from a ruptured intracranial berry aneurysm. [2]

CORRESPONDENCE TO

Dr. Akhilesh kr. Agarwal Room no. 6 Doctors chummury 41 Eden hospital road. Kolkata 700073 West Bengal. India akhil2u@rediffmail.com akhil_g_2002@yahoo.com phone +919883291911 +919433169282

References

1. P.A.Gabow Autosomal Dominant Polycystic Kidney Disease
N. Engl. J. Med., July 29, 1993; 329(5): 332 - 342.
2. E. Dicks, P. Ravani, D. Langman, W. S. Davidson, Y. Pei, and P. S. Parfrey
Incident Renal Events and Risk Factors in Autosomal Dominant Polycystic Kidney Disease: A Population and Family-Based Cohort Followed for 22 Years
Clin. J. Am. Soc. Nephrol., July 1, 2006; 1(4): 710 - 717.

Author Information

Akhilesh Kr. Agarwal

Udipta Ray, MBBS, MS
Asst. Prof., Medical College Kolkata

Ramanuj Mukherjee, MBBS MS Gen Surgery

Ambar Banerjee, MBBS

Akash Bora, MBBS