

Giant hydronephrosis : a rare cause of gross abdominal distension

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A 53-year old man was admitted with painless progressive abdominal distension of 1 year duration. He was a lorry driver and his abdomen started touching the steering wheel, making his job difficult. The abdominal distension was increasing despite treatment for “presumed” ascites. Clinical examination revealed a symmetrically distended abdomen with no palpable masses (Figure 1). The swelling was dull to percussion and a fluid thrill could be elicited. But there was no shifting dullness. Ultrasonography revealed a cystic lesion occupying the entire abdomen and pelvis. The left kidney was not visualised. A CT scan showed a large cystic lesion with a normally functioning right kidney (Figure 2). Absence of fluid in the subhepatic space excluded ascites. At laparotomy, a giant hydronephrotic left kidney with a normal calibre ureter was found. Decompression of the kidney yielded 23 litres of dark grey fluid. A left

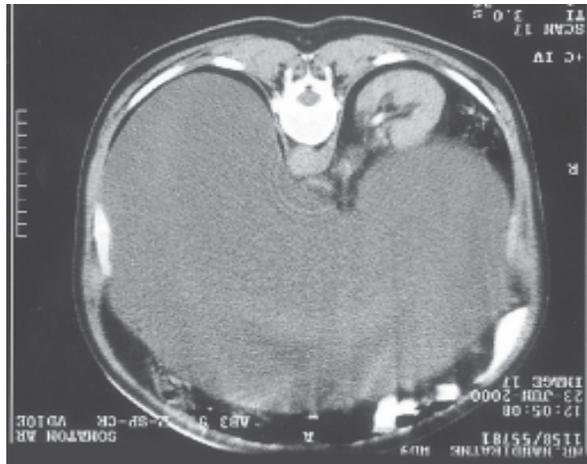


Figure 2. CT Scan showing a large cystic lesion.

nephrectomy was performed. Postoperative recovery was uneventful.

Giant hydronephrosis is defined as a kidney containing more than 1000 ml of fluid in its collecting system [1]. Such a kidney, though rarely, may fill the entire abdomen and pelvis, producing a symmetrical distension of the abdomen. In such a case its differentiation from massive ascites, which is more common, may be clinically difficult [2]. Although there are characteristic ultrasonographic features of a giant hydronephrosis such as a multi-septated cystic lesion with the ‘cysts’ communicating with one another, accurate preoperative diagnosis can be made only in a proportion of patients [1]. The differential diagnosis includes mesenteric cysts, pancreatic pseudocysts and ovarian cysts [3]. The common causes for giant hydronephrosis are congenital pelvi-ureteric junction obstruction, flap-like mucosal folds and calculous obstruction [2].

References

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Figure 1. Gross abdominal distension mimicking ascites.

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