

RENAL PSEUDOCYST SIMULATING AS A SIMPLE CYST: AN ULTRASOUND CASE REPORT

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Abstract : Renal involvement by pancreatitis is uncommon. Pseudocysts in the kidneys carry the potential for massive hemorrhage if they erode the renal vessels or can cause thrombosis due to vascular compression. They are not as benign as simple cysts and need timely management. Hence we report a case of renal pseudocyst that simulated as a simple cortical cyst.

INTRODUCTION

Classically, pancreatitis is a disease process where spread is not limited by adjacent organs, mesenteries or the omentum. While pancreatitis most commonly involves the pararenal spaces and lesser sac it can extend to and involve adjacent organs. Renal involvement is typically inflammatory extension into the anterior and sometimes posterior pararenal space^{1,2}. Uncommonly, a pseudocyst can track into the perirenal space and even beneath the renal capsule. This pseudocyst can at times, even simulate a simple renal cyst. When pancreatic fluid tracts beneath the capsule it can result in a Page kidney due to compressive forces on the renal parenchyma; percutaneous drainage may be needed.

CASE REPORT

A 37-year-old male patient was referred to the radiology department for ultrasound examination of the abdomen with pain in the epigastrium. Patient was a chronic alcoholic for the last 5-7 years. The laboratory findings were within normal limits except for the mildly raised erythrocytic sedimentation rate. Serum Pancreatic amylase was within normal limits. The *ultrasound* of the patient revealed small, atrophic, calcific pancreas with a dilated main pancreatic duct (figure 1). There was a cystic mass in the lesser omentum in relation to the distal body and tail of the pancreas. Another cystic lesion was seen in the left kidney in the superomedial part resembling a simple cyst. On careful scanning, the cyst appeared along and subcapsular in location with an interface between it and the renal parenchyma. Further examination revealed a possible communication between the cyst in lesser omentum and the left kidney as they were both tapering towards each other. Based on the above findings the diagnosis of the chronic calcific pancreatitis with pseudocyst in the lesser omentum and the left kidney was made.

Computed tomography of the patient revealed chronic, calcific, atrophic pancreatitis with a large lesser omental cyst dissecting into the left kidney in the subcapsular region with a very narrow neck of communication in between the two cysts confirming the diagnosis of renal pseudocyst as suggested by ultrasonography (Figure 2).

Biochemical analysis of the aspirated fluid from the cyst revealed increased pancreatic amylase confirming the diagnosis of left renal pseudocyst as suggested by ultrasonography.

DISCUSSION

Pseudocyst is a fluid collection that has developed a well-defined non-epithelialised wall in response to extravasated enzymes. It is generally spherical in shape and distinct from the other structures. Most commonly, pseudocyst formation is associated with alcoholic or biliary pancreatitis. Classically, a pseudocyst is seen on ultrasound as a well defined, smooth-walled, anechoic structure with acoustic enhancement. Pseudocyst

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Figure 1: Us scan through the epigastrium showing calcific, atrophic pancreatitis

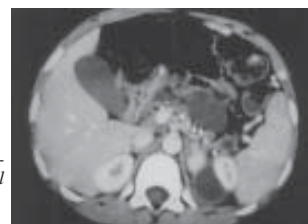


Figure 2 : CT scan showing possible communication between lesser omental and left renal cyst and atrophic, calcific pancreatitis

may become very large or may be strategically placed and cause obstruction of the stomach, small bowel (especially duodenum), colon or the bile ducts. They can also dissect into the adjacent organs such as the liver, spleen, and kidney. When subcapsular pseudocyst is very large it can result in a Page Kidney due to compressive forces on the renal parenchyma. Percutaneous drainage may be needed. Other unusual complications include renal vascular abnormalities such as narrowing of the renal vein, renal vein thrombosis, perirenal varices and asymmetric renal enhancement due to extrinsic pressure on one of the renal arteries.

US and CT findings of a pancreatic tail pseudocyst extending into the subcapsular space of the left kidney has been described by Lo et al³ and Singh et al⁴ also described renal pseudocysts in patients of pancreatitis and have emphasized the role of computed tomography in the diagnosis. Similar case report also appeared in Japanese literature⁵.

Our case report emphasizes the role of the ultrasound in the diagnosis of renal pseudocyst and its differentiation from the simple renal cyst.

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