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CASE REPORT

Renal Lymphangiectasia: Report of a Rare Case

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Abstract: Renal lymphangiectasia is a rare, benign developmental malformation of the kidney. Although the disease is generally asymptomatic, it can lead to serious complications such as kidney failure and hypertension. In some cases, radiological imaging alone is sufficient for diagnosis [1][2]. Since it is a rare condition, familiarity with the radiological findings is important for making a differential diagnosis. Early diagnosis is crucial for preventing and monitoring serious complications. We present the case of a 42-year-old female patient who was admitted to our clinic with right flank pain and was diagnosed with perirenal lymphangiectasia.

Keywords: Renal lymphangiectasia, kidney failure, hypertension, Percutaneous drainage.

1. INTRODUCTION

Renal lymphangiectasia is a rare benign condition that results from a malformation of the renal and perirenal lymphatic drainage of the kidney [3]. Although renal lymphangiectasia is usually asymptomatic, it can sometimes be symptomatic. Symptoms can include hematuria, flank pain, hypertension, and, in severe cases, renal failure. Complications such as infection, rupture, or hemorrhage may occur during the course of the disease. Renal lymphangiectasia can be detected at any age and is seen with equal frequency in both genders [4]. The differential diagnosis includes renal abscess, urinoma, obstructive pathologies causing uropathy, hydronephrosis, and cystic diseases of the kidney. Percutaneous drainage, fluid aspiration, or imaging methods can be used for diagnosis. Here, we present the case of a 42-year-old female patient who was admitted with a complaint of right flank pain, with the diagnosis confirmed through radiological imaging. This approach helped avoid unnecessary invasive procedures. Once the diagnosis was confirmed, precautions were taken against potential complications of renal lymphangiectasia.

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2. CASE REPORT

A 42-year-old female patient was admitted to our clinic with a complaint of mild bilateral flank pain, present for two months. The only physical examination finding was mild tenderness in the bilateral flank region. The patient had no comorbidities or previous surgical history.

The patient's urinalysis and kidney function tests were normal. Urinary system ultrasonography revealed four thin-walled anechoic exophytic cortical cysts in the lower pole of the right kidney, tending to coalesce and divided by thin septa. The largest cyst measured 24x17 mm. Additionally, cystic appearances were observed in the lower pole of the left kidney, with larger cysts tending to coalesce with thin septa. The largest cyst measured 93x46 mm. An exophytically located cortical cyst, measuring 17x13 mm, was observed in the upper pole of the left kidney.

In the patient's abdominal contrast-enhanced computed tomography (CT), bilateral kidney sizes

were normal, parenchymal thicknesses were normal, and renal contours were regular. Fluid collection with a density of 3 HU without contrast enhancement was observed in the bilateral perirenal area (Fig. **1**). The cisterna chyli was dilated. No cystic formations or free intra-abdominal fluid were seen in the abdominal organs on imaging. No free fluid or lymphadenopathy was noted.

The typical non-contrast-enhancing perirenal collection was consistent with renal lymphangiectasia, and the diagnosis was made without the need for further work-up or invasive procedures.

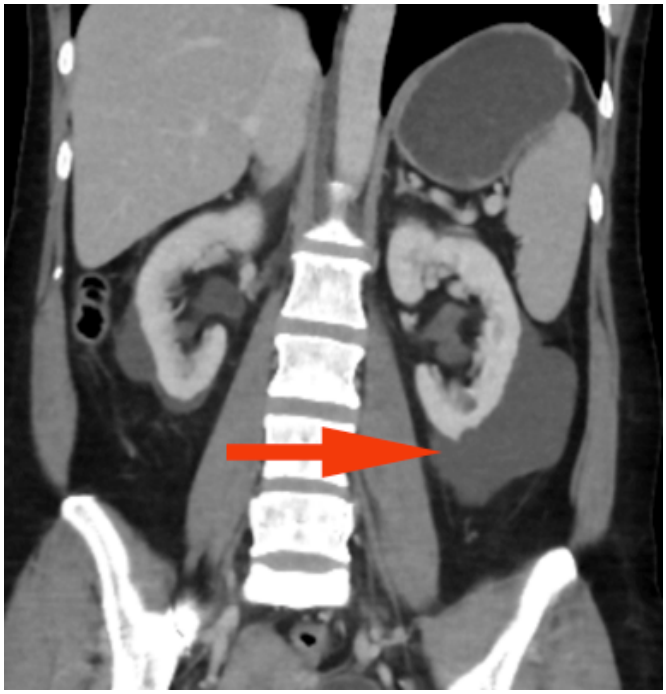

Fig. (1). Collection of perirenal fluid.

Since the patient only had mild flank pain, which is a possible complication secondary to perirenal lymphangiectasia, she was followed up with pain management. When the patient was called for a follow-up 6 months later, it was found that she had benefited from pain management, and there had been no changes in her kidney function tests or urinalysis. No additional radiological imaging was performed at that time.

3. DISCUSSION

Renal lymphangiectasia is a rare disease characterized by impaired lymphatic drainage and dilation of the renal lymphatics. It can be unilateral or bilateral. The differential diagnosis of this condition includes cystic kidney diseases, obstructive pathologies that may cause hydronephrosis, and urinoma. If left untreated, renal vein thrombosis, hypertension, and deterioration of kidney function may occur. However, some cases may present without renal function deterioration or complications.

Percutaneous drainage can be performed in patients with severe pain or impaired renal function. Antihypertensive treatment can be initiated in cases with hypertension. Nephrectomy may be necessary for patients with kidney atrophy or renal vein thrombosis [5, 6]. Patients with uncomplicated renal lymphangiectasia can be followed without treatment [7].

In the case presented, the patient complained only of mild flank pain, and no deterioration in renal function, hydronephrosis, or other complications was observed. As with other uncomplicated cases, a conservative approach was recommended. It is important to accurately diagnose perirenal lymphangiectasia using radiological imaging and to offer appropriate treatment options depending on the complications present.

CONCLUSION

Typical radiological findings of renal lymphangiectasia are crucial for preventing misdiagnosis in patients presenting with symptoms such as flank pain and abdominal pain. Renal lymphangiectasia, when correctly diagnosed, can avoid unnecessary medical interventions caused by incorrect differential diagnoses. Differential diagnosis includes pathologies such as cystic kidney diseases, urinoma, and hydronephrosis. Since it is a rare condition, being familiar with the radiological findings of renal lymphangiectasia is vital for making the correct differential diagnosis in patients presenting with symptoms like hematuria, flank pain, and hypertension. Early and accurate diagnosis enables appropriate preparation for possible complications and allows for the necessary precautions during patient follow-up.

AUTHORS' CONTRIBUTIONS

The author confirms sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and manuscript preparation.

CONSENT FOR PUBLICATION

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CONFLICT OF INTEREST

The author confirms that this article's content has no conflict of interest.

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