



Oncology

Rare images of renal mass and lithiasis in native kidney after renal transplantation in a patient with hematuria: Casual or correlated?☆

H. Hafiani¹, M.R. Cherkaoui Jaouad^{1,*}, M. Mahi

Cheikh Khalifa International University Hospital, Mohammed VI University of Health Sciences, Casablanca, Morocco

A B S T R A C T

Renal transplantation is a common treatment option for patients with end-stage renal disease. The goal of transplantation is to restore normal renal function and improve their quality of life. However, some patients may experience complications after transplantation, including the development of calculi or tumors in their native kidneys. In such cases, the question arises whether native nephrectomy should be performed during renal transplantation or not. A 62-year-old patient with a history of renal transplant twenty years ago presented a macroscopic hematuria.

1. Introduction

Renal transplantation is a common treatment option for patients with end-stage renal disease. The goal of transplantation is to restore normal renal function and improve their quality of life. However, some patients may experience complications after transplantation, including the development of calculi or tumors in their native kidneys. In such cases, the question arises whether native nephrectomy should be performed during renal transplantation or not.

2. Case report

A 62-year-old patient with a history of renal transplant twenty years ago presented a macroscopic hematuria. Laboratory tests showed high levels of potassium (5.1 mEq/L), urea (1.52 g/L), and creatinine (39.39 mg/L), indicating acute or severe chronic renal failure. The urine culture showed leukocyturia with non-bacterial clumps and hematuria.

A CT-Scan revealed native kidneys with calculi and a functioning renal transplant, but also an heterogeneous mass in the right native kidney (Fig. 1).

Importantly, due to the patient's renal insufficiency, an injection could not be performed. Without this information, it remains unclear whether the hematuria was due to the presence of the mass or the calculi.

3. Discussion

The presence of calculi in native kidneys after renal transplantation is a well-known complication and has been documented in numerous studies.¹ The decision to perform native nephrectomy during transplantation is often a complex one and should be made on a case-by-case basis, taking into account the patient's individual medical history and current health.²

In the present case, the heterogeneous mass in the right native kidney adds another layer of complexity to the decision-making process. The mass could be indicative of a malignant or benign tumor, and further evaluation, including additional tests and medical imaging, is necessary to establish a precise diagnosis. Unfortunately, due to the patient's renal insufficiency, an injection could not be performed. Further evaluation, including additional tests and medical imaging, is necessary to establish a precise diagnosis in this case, and the patient's renal insufficiency presents a challenge in terms of further investigation and treatment.

While it is possible that the hematuria is a result of the calculi in the native kidneys, it could also be related to the heterogeneous mass in the right native kidney or some other underlying condition. As far as we know this is the first reported case of such an association.

Native kidney and renal allograft are affected by both benign,³ and malignant or metastatic tumors more frequently than previously thought.

The average age of patients developing cancer on the native kidney is 49.7.⁴ The treatment in the native kidney group consisted essentially of nephrectomies.⁴

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* Corresponding author. UM6SS, Anfa City, Bld Mohammed Taïeb Naciri, Commune Hay Hassani 82 403, Casablanca, Morocco.

E-mail addresses: hafianihamza@gmail.com (H. Hafiani), reda.cherkaoui.jaouad@gmail.com (M.R. Cherkaoui Jaouad), prmahimohamed@yahoo.fr (M. Mahi).

¹ Co-authors

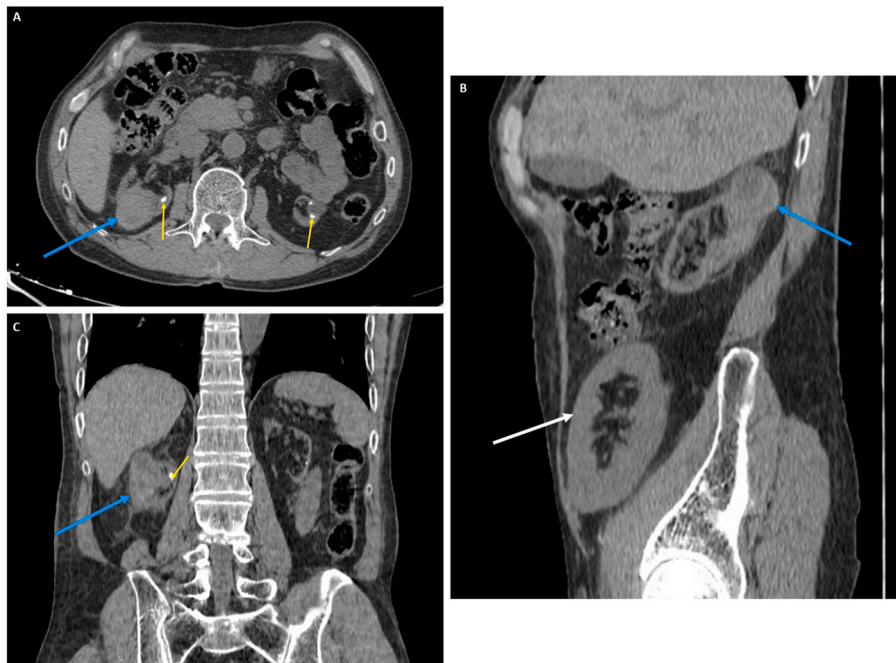


Fig. 1. Axial (A), sagittal (B) and coronal (C) sections of abdominal CT scan showing an heterogeneous mass (blue arrow) in the right native kidney (white arrow), lithiasis (yellow arrow) in both native kidneys and a functioning renal transplant. (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

4. Conclusion

The decision to perform native nephrectomy during renal transplantation is a complex one that requires careful consideration of the patient's individual medical history and current health status and requires a multidisciplinary meeting.

Declaration of competing interest

None.

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