

RENAL INCIDENTALOMA: A CASE REPORT

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ABSTRACT

Incidentaloma is a medical term that designates asymptomatic benign and malignant tumors found on imaging tests such as ultrasound, MRI, and CT SCAN. We will present a case of malignant renal tumor, diagnosed on ultrasound examination and confirmed by magnetic resonance imaging.

KEYWORDS: RENAL INCIDENTALOMA; ULTRASOUND; MAGNETIC RESONANCE

INTRODUCTION

We will present a case of malignant renal tumor, which was diagnosed in a routine ultrasound examination and was confirmed by magnetic resonance imaging.

The significant increase in incidental diagnosis of small malignant and benign renal tumors in recent decades is due to the great improvement in ultrasound devices and the increase in requests for preventive abdominal exams 1-6.

Currently, ultrasound has become the main method of initial diagnosis of renal tumors 5.

90% of malignant renal tumors are renal cell carcinomas, mainly with clear cell histological type 1-3. However, in most cases patients are asymptomatic 6.

CASE REPORT

A 57-year-old patient attended a routine ultrasound on 08/19/2021, with no symptoms and no history. A hypoechoic image in the right kidney was diagnosed. being referred to the urologist, who requested an abdominal magnetic resonance imaging (MRI). With the MRI result, the patient was referred for radical nephrectomy, which was performed on 10/15/2021.

The patient underwent postoperative control ultrasound on 01/11/2022, with no changes.

Total abdomen ultrasound

Topical liver, with regular contours and homogeneous sonic texture, without echographic alterations. The right and left lobes measure 12.24 x 7.14 cm respectively. The intra and extrahepatic bile ducts are not dilated. The common bile duct measures 3.6mm with a normality value (NV) up to 06mm. Suprahepatic veins are of normal caliber. The portal vein measures 8.8mm (NV up to 14mm).

Physiologically distended gallbladder with anechoic content.

Pancreas with usual morphology and echogenicity.

Topical spleen, with regular contours and homogeneous sonic texture, measuring 9.27 cm in its largest diameter (NV

up to 13 cm.).

Kidneys with normal topography and dimensions, regular contours and preserved cortical and medullary echogenicity. In the right kidney, a hypoechoic image was observed in the middle third and pelvis, measuring 4.00 x 3.74 cm., compatible with a solid nodule – figure 1.

Kidney dimensions:

Bipolar diameter of the right kidney = 11.62 cm. (NV 9 to 12 cm.).

Right kidney parenchyma thickness= 1.52 cm. (NV > 1.0cm.).

Bipolar diameter of the left kidney = 11.39 cm.

Left kidney parenchyma thickness= 1.90 cm.

Absence of free fluid in the peritoneal cavity.

Full bladder, without ultrasound changes.

Diagnostic impression: Ultrasound images often associated with:

Hypoechoic image in the right kidney.

Obs.: At clinical criteria, I suggest MRI for diagnostic complementation.



Figure 1. Nodular ultrasound image in the right kidney.

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Abdominal magnetic resonance

Solid mesorenal vascularized renal lesion on the right, suggestive of a primary neoplasm (Figures 2-4).

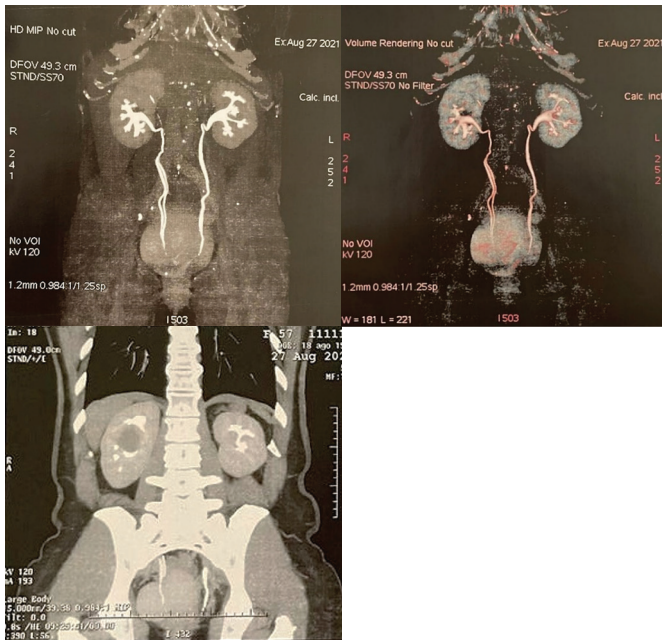


Figure 2-4. Abdominal magnetic resonance image of vascularized renal nodule in the right kidney.

Pathology report - diagnosis:

Right nephrectomy product. Chromophobe renal cell type carcinoma.

CONCLUSION

Lumbreras et al 3 performed a systematic review of the literature in which 44 articles were selected for analysis. The mean frequency of incidentaloma findings was 23.6% (CI 15.8-31.3%), being higher in studies with computed tomography (mean 31.1%, 95% CI 20.1-41.9%). About 64.5% (95% CI 52.9-76.1%) of patients had clinical follow-up and in 45.6% (95% CI 32.1-59.2%) there was clinical confirmation. The authors stated that there is no defined strategy for these incidentaloma findings. However, the follow-up of these patients is essential.

Hitzeman & Cotton 4 reported the Bosniak classification as a well-accepted method for screening for kidney injuries. Lesions classified as category I (benign simple cyst) or II (benign cystic lesion with some complex features) do not need to be followed up. Complex cysts, without CT enhancement, larger than 3 cm (category IIF) have a risk of malignancy of 5% to 10% and should be followed up with imaging studies, although the frequency of monitoring is not well defined. The risk of malignancy approaches 50% in similar lesions that are more complicated and increasing (category III). Category IV lesions include more clearly malignant cystic mass-

es. Suspicious complex renal cysts or masses are usually not biopsied due to the risk of sampling error (exceptions are suspected abscess, lymphoma, or metastatic lesions). Surgical resection is the rule. However, surgery can be avoided in the case of solid lesions containing fat with the appearance of benign angiomyolipomas.

In the case presented, a complementary examination (MRI) was essential for decision-making in the approach to the patient, collaborating for an early intervention, aiming at an improvement in the prognosis.

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