Myxomas are rare mesenchymal tumors that can appear in many anatomical locations, although they are mainly seen in heart and skin. To date, only twelve cases of pure renal myxomas have been reported in the literature. We describe a case of a young Cuban woman with an asymptomatic irregular cyst lesion in her left kidney which was eventually diagnosed as renal mixoma. We also provide radiological and pathological studies.

Key words: kidney, magnetic resonance imaging, myxoma.
Fig. 1. Magnetic resonance images pointing out the cystic lesion within the left kidney (white arrow). A, B) Contrast-enhanced T1-weighted image in venous phase shows a low intense renal mass (coronal and transverse view respectively). C) T2-weighted image shows a hyperintense renal mass (transverse view).

Bcl2. The Ki-67 index was very low (less than 1%). Taking into account these histological and immunohistochemical appearances, the final histopathological diagnosis was primary intrarenal myxoma.

Although an accurate histopathological diagnosis of this benign tumor is not very difficult using basic morphologic criteria, a full differential diagnosis has to be made considering other possible renal benign mesenchymal tumors such as leiomyoma, hemangioma, lymphangioma, neurofibroma, solitary fibrous tumor, schwannoma and glomus tumor. Furthermore, renal myxomas should also be differentiated from other benign and malignant mesenchymal tumors with myxoid transformation, considering myxoid neurofibroma, myxoid leiomyoma, myxolipoma and myxoid variant of malignant fibrous histiocytoma [3]. Our case did not show different histological areas such as neural or leiomyomatous changes.

Radiologically, the tumoral lesion was classified as Bosniak IV by the radiologist according to the Bosniak Classification of Renal Cystic Disease, because of its irregular wall thickening and the evidence of some independent enhancing soft-tissue components [4].

In conclusion, combination and integration of clinical behavior with radiology are usually in agreement in malignant tumors. However, this case highlights the major relevance of histological examination in order to eventually classify every tumor as benign or malignant, especially when treatment differs significantly.

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References

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Fig. 2. A) Sliced gross pathologic examination shows a well-circumscribed renal tumor with a soft to solid, semi-translucent gelatinous myxoid appearance with gray-white areas admixed with some brownish zones. B) Microscopic findings of the tumor. Low-power view showing a pseudoencapsulated myxomatous tissue constituted by fibroblast-like spindle cells. Some hypercellular areas are noted in peripheral zones. Large amounts of basophilic interstitial mucoid material are seen. Remaining renal parenchyma is noted on the left upper corner. The inset shows better details of the myxoid mass. (HE, magnification 20×). C) Immunohistochemistry for vimentin presents strong cytoplasmic positivity in tumor cells (magnification 400×). D) The tumor cells display strong staining for alpha-smooth muscle actin (magnification 400×). E) The fibroblast-like cells of the tumor are weakly positive for CD99 (magnification 400×). All immunostaining was performed by immunoperoxidase technique on paraffin-embedded tissue sections.