

Author reply

Sir,

I read with interest, the article "Solid renal masses in adults" by Mittal *et al.*^[1] I would like to add as well as reiterate certain practical points with respect to the same. As mentioned by the authors, fat containing renal cell carcinoma (RCC) and angiomyolipomas (AML) are close differentials, especially in cases of lipid poor AML. Enhancement features on computed tomography (CT) are equivocal in differentiating these lesions. I would like to recall the role of positron emission tomography (PET) CT in differentiating RCC and AML, as emphasized by Lin *et al.*^[2] Of the 21 AMLs included in the study, none of them showed a maximum standardized uptake value (SUV_{max}) of more than 1.98.^[2] Kim *et al.*, in their study, found that 25 of the 27 RCC had SUV_{max} of $>3.06 \pm 0.45$.^[3]

As mentioned by the authors, intrarenal transitional cell carcinomas (TCC) and central RCCs are very close differentials and distinguishing them in imaging practice is difficult but essential. Findings such as tumor epicenter in collecting system, focal filling defect in renal pelvis, renal shape preservation, absence of cystic areas/necrosis, homogeneous contrast enhancement, and extension toward pelviureteric junction are quite favorable towards diagnosis of TCC, as established by Raza *et al.*^[4]

Ultrasound elastography also appears to have a role in distinguishing benign and malignant lesions. Onur *et al.*, in their study involving 71 solid renal masses, recognized that the mean strain index value of malignant lesions was significantly higher than that of benign lesions.^[5]

Renal pseudotumors, especially nodular compensatory hypertrophy, may be diagnosed unequivocally using non contrast magnetic resonance imaging with diffusion weighted images.^[6,7] Goyal *et al.* found that none of the pseudotumors showed restricted diffusion; whereas restricted diffusion was seen in all the solid RCCs. Diffusion weighted imaging with apparent diffusion coefficient values is very helpful in lesion characterization, especially in the setting of chronic kidney disease.

Nevertheless, as emphasized by the Mittal *et al.*, lesion characterization by imaging is definitely difficult in smaller masses <1.5 cm, necessitating close monitoring with follow-up imaging.

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Conflicts of interest

There are no conflicts of interest.

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References

1. Mittal MK, Sureka B. Solid renal masses in adults. *Indian J Radiol Imaging* 2016;26:429-42.
2. Lin CY, Chen HY, Ding HJ, Yen KY, Kao CH. FDG PET or PET/CT in Evaluation of Renal Angiomyolipoma. *Korean J Radiol* 2013;14:337-42.
3. Kim JS, Lim ST, Jeong YJ, Kim DW, Jeong HJ, Sohn MH. The characteristics of renal cell carcinoma in F-18 FDG PET/CT: Relation to TNM staging, grading and other renal malignant neoplasm. *J Nucl Med* 2010;51:1269.
4. Raza SA, Sohaib SA, Sahdev A, Bharwani N, Heenan S, Verma H, *et al.* Centrally infiltrating renal masses on CT: Differentiating intrarenal transitional cell carcinoma from centrally located renal cell carcinoma. *AJR Am J Roentgenol* 2012;198:846-53.
5. Onur MR, Poyraz AK, Bozgeyik Z, Onur AR, Orhan I. Utility of semiquantitative strain elastography for differentiation between benign and malignant solid renal masses. *J Ultrasound Med* 2015;34:639-47.
6. Indiran V. Magnetic resonance imaging as problem-solving

tool in renal pseudotumor in chronic kidney disease: A case of nodular compensatory hypertrophy. *Indian J Nephrol* 2016;26:470-1.

7. Goyal A, Sharma R, Bhalla AS, Gamanagatti S, Seth A. Pseudotumours in chronic kidney disease: Can diffusion-weighted MRI rule out malignancy. *Eur J Radiol* 2013;82:1870-6.

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