

Oral Squamous Cell Carcinoma Metastases to the Kidneys: Is It Common?

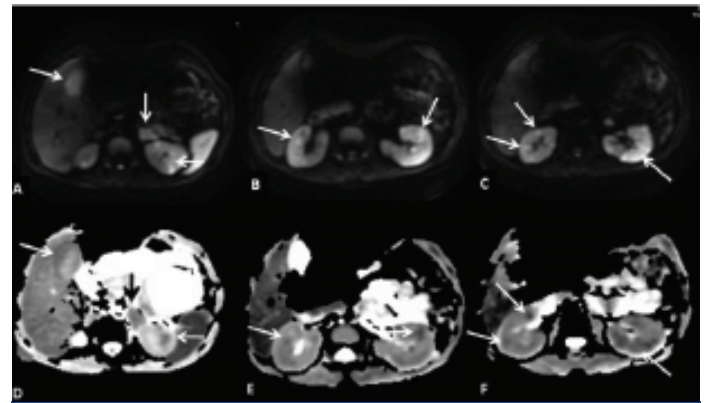
BINIT SUREKA¹, KALPANA BANSAL², NITESH AGRAWAL³, DIPANJAN PANDA⁴, ANKUR ARORA⁵**Keywords:** Aorta, Calcification, Chronic kidney disease, Radial route

Metastases to the kidneys are rare and are frequently erroneously diagnosed as primary renal tumour. The kidney is unusual site of metastatic disease and is the fifth most common site of metastases in the body after lung, liver, bone and adrenals.

A 42-year-old male known case of operated buccal carcinoma of cheek (squamous cell carcinoma) presented with complaints of upper abdominal discomfort. Patient was investigated with Computed Tomography (CT) scan outside for the same and was detected to have multiple space occupying lesions in lungs, liver and both kidneys [Table/Fig-1a-c]. For characterization of these lesions patient was referred to us. In our institute patient underwent contrast-enhanced Magnetic Resonance Imaging (CE-MRI). On T2-weighted and CE-MRI images, multiple lesions were detected in liver, bilateral kidneys and left adrenal. Lesions in kidneys were multicentric, appeared as 'black holes' on MRI and showed restriction on Diffusion-weighted images [Table/Fig-2,3]. The imaging was classical in keeping with metastases involving the liver, kidney and left adrenal gland.

DISCUSSION

Metastases to the kidneys are rare and are frequently erroneously diagnosed as primary renal tumour. The kidney is unusual site of metastatic disease and is the fifth most common site of metastases in the body after lung, liver, bone and adrenals. The reported incidence of renal metastasis of extrarenal neoplasms varies from



[Table/Fig-3a-f]: (a-c) Axial MR diffusion-weighted images showing bright lesions (arrows) in liver, left adrenal and bilateral kidneys (d-f) corresponding ADC maps MR image showing lesions appearing dark (arrows) suggestive of diffusion restriction

2 to 20% [1,2]. Differentiation between primary renal malignant tumour and multifocal renal metastases is arduous when there is isolated renal involvement in a case of occult primary [3].

Since the classical symptoms of pain and haematuria is seen only in 20% of cases, metastatic renal disease is seldom clinically identified [2,4]. Most common tumours metastasizing to kidneys are lymphoma and lung carcinoma. Histopathologically, tumours metastasizing to kidneys are mostly adenocarcinomas, followed by squamous cell carcinomas, sarcomas, germ cell tumours and melanoma. Radiological imaging methods either CT scan or CEMRI is the most accurate method to screen for secondary renal tumours.

Renal metastases in patients with history of malignancy may mimic primary renal tumours. Radiologically, metastases are usually small, subcapsular in location, multicentric, bilateral, has a history of known primary and metastases to other organs at the time of presentation. Differentials include multicentric renal cell carcinoma, transitional cell carcinoma, pyelonephritis, or phlegmon [5].

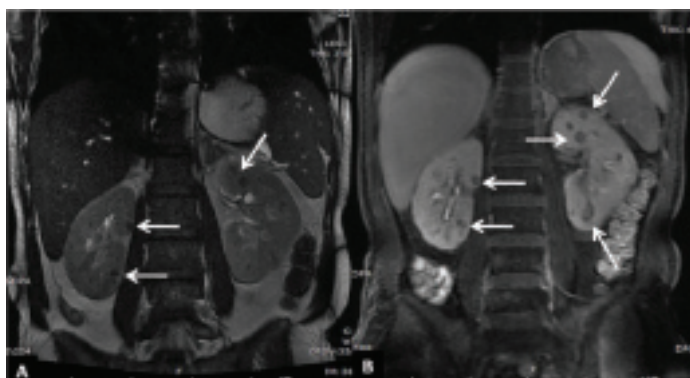
Cai et al., have reported isolated renal metastasis from squamous cell lung cancer in a 53-year-old female [6]. Aksu et al., have also reported isolated renal metastasis from left colon cancer [7]. Giashuddin et al., in their case series of 11 cases with metastases to the kidneys identified seven cases from lung primary, three cases from lymphoma and one case from haemangiopericytoma [8]. Similarly, there are other few case reports described by various authors pertaining to this entity [9,10].

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[Table/Fig-1a-c]: (a) Axial contrast-enhanced CT scan of neck showing fat graft (arrow) in a case of operated squamous cell carcinoma buccal mucosa (b) Lung window sections showing cavitating and solid lung metastases (arrows) (c) Coronal contrast-enhanced MRI image showing multiple liver metastases (arrows)



[Table/Fig-2a,b]: (a) Coronal MR-FIESTA sequence showing hypointense black hole lesions (arrows) in bilateral kidneys (b) Coronal contrast-enhanced MRI image hypo enhancing black hole lesions (arrows) better

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PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of Radiology, Institute of Liver & Biliary Sciences, New Delhi, India.
2. Assistant Professor, Department of Radiology, Institute of Liver & Biliary Sciences, New Delhi, India.
3. Senior Resident, Department of Radiology, Institute of Liver & Biliary Sciences, New Delhi, India.
4. Associate Professor, Department of Oncology, Institute of Liver & Biliary Sciences, New Delhi, India.
5. Associate Professor, Department of Radiology, Institute of Liver & Biliary Sciences, New Delhi, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Binit Sureka,

Assistant Professor, Department of Radiology, Institute of Liver & Biliary Sciences (ILBS), New Delhi-110070, India.

E-mail: biniturekapgi@gmail.com

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