

## Dual Malignancy, Single Kidney ; Synchronous Papillary And Clear Cell Carcinoma

Prashanth Adiga\*, Manjunath Shetty\*\*, Anuj Mahajan\*\*\*, Nanda Kishore\*\*\*\*

\*Assistant Professor, \*\*HOD, \*\*\*MCH Resident, \*\*\*\*Assistant Professor, Department of Urology, FMNCH, Mangalore, 575002

**Abstract Background:** Renal carcinoma is one of the most common solid organ malignancies in adults . Various pathological types such as clear cell , papillary and chromophobe carcinoma are present . Clear cell carcinoma is most common subtype , However simultaneous occurrence of two types in a single kidney is extremely rare. We present a case of 64 years old male diagnosed to have a renal mass . The patient was taken up for radical nephrectomy . Post surgery HPE showed synchronous clear cell and papillary carcinoma [Adiga Prashanth Natl J Integr Res Med, 2020; 11(1):85-86]

**Key Words:** Dual Malignancy, Single Kidney, Clear Cell Carcinoma

**Author for correspondence:** Dr. Anuj Mahajan, Mahajan Nursing Home, Dhangu Road, Pathankot, Punjab.  
E-Mail : mahajan1612@gmail.com

**Introduction:** Renal cell carcinoma is one of the most common kidney tumours accounting for 2-3 % <sup>1</sup> of all malignancies. Different pathological types such as clear cell carcinoma , papillary cell carcinoma and chromophobe carcinoma are found . Individually most common type is the papillary ( 80 %), followed by papillary (10%) and in the last chromophobe (5%)<sup>2</sup> . Synchronous presentation of two tumours is very rare and has not been commonly reported in literature.

Here we discuss a case of 64 yr old male patient who was diagnosed to have simultaneous occurrence of clear cell and papillary carcinoma in a single kidney.

**Case Report:** A 64 years old male , reformed smoker was admitted in the department of urology of Father muller medical college which is a leading tertiary care hospital in Karnataka , India. The patient had come with complaints of right flank pain and haematuria. Haematological investigations were within normal limits.

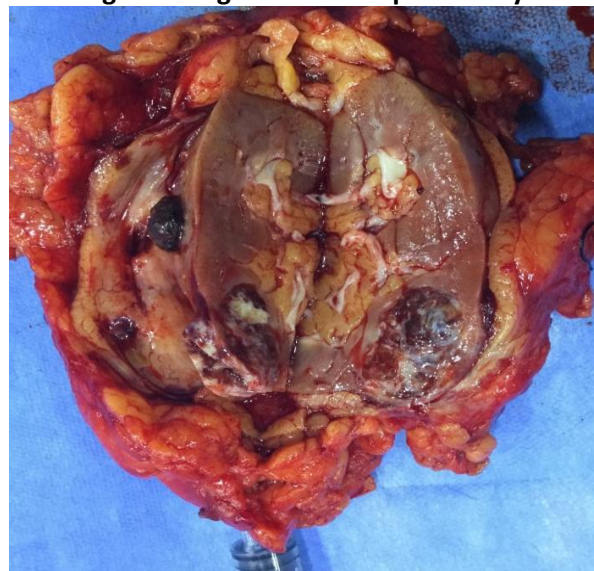
Ultrasonography was suggestive of a right renal mass 39 x 34 mm in size . Contrast CT showed a hyperdense enhancing mass at the lower pole 43x35mm in size [Figure I].

**Figure 1: Ultrasonography Of A Right Renal Mass**



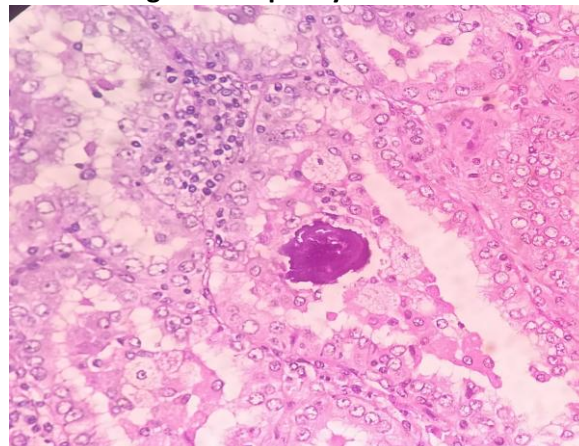
Right radical nephrectomy was done .Intra op there were two lesions one in the midpole about 2x2x1 cm in size and another one in the lower pole 3x2x4 cm in size [ Figure II]

**Figure 2: Right Radical Nephrectomy**



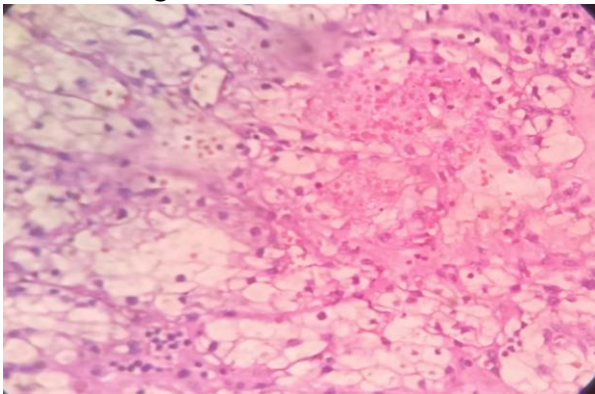
The specimen was sent for histopathological analysis , and to everyones surprise two distinct pathological patterns were observed. The midpole lesion was predominantly suggestive of papillary carcinoma [Figure III]

**Figure 3: Papillary Carcinoma**



Whilst the lower pole lesion was comprised of clear cells [Figure IV]

Figure 4: lower Pole Lesion



**Discussion:** Renal cell carcinoma represents the most common of all kidney tumors in adults male in sixth to seventh decade of life <sup>3</sup>Most common subtype is clear cell carcinoma followed by papillary type .Our patient presents with the two most common kinds of renal cell carcinomas. However, their synchronous appearance in the same kidney, is a rare occurrence. Only about 50 cases of synchronous renal neoplasm have been reported in the literature till date.

Ustuner M. et al in 2014 <sup>4</sup> reported the association of a papillary renal cell carcinoma and a clear cell renal cell carcinoma in another two cases correlating to our case .

The most common symptoms reported are hematuria in 90% of cases, flank pain in 19% and mass effect in 14% <sup>3</sup> .Our patient presented the first two symptoms but did not feel mass effect although the kidney was enlarged. Pre operative imaging is not a specific method to recognize multifocal tumours and many times lesions may be missed as was the case in our patient. However careful intraoperative inspection of the entire kidney especially while performing nephron sparing surgery is a must .

Clear cell carcinoma has the highest malignancy , 5 year survival rate of 50-60 % while papillary cancer has a lower metastatic potential, and a 5 year survival rate of 80-90 % .<sup>5</sup>

Thus prognosis in our patient was favourable. Radical nephrectomy is the ideal surgery for RCC , however nephron sparing surgery can be done depending upon tumour size and other characteristics . We conclude that inspite of very low occurrence, multiple ipsilateral synchronous

RCC of different histological subtypes should always be considered preoperatively .

**References:**

1. R.L. Siegel, K.D. Miller, A. Jemal. Cancer statistics . Cancer clinics. 2016; 66: 7-30
2. H.T. Cohen, F.J. McGovern. Renal-cell carcinoma . National England Journal of Medicine. 2005; 353:2477-2490
3. M. Fernández-Arjona, D. Santos-Arrontes, F. DeCastro-Barbosa, et al. Carcinoma renal de células claras y carcinoma urotelial ipsilateral sincrónicos: aportación de un nuevo caso y revisión de la literature . Arch Esp Urol. 2005; 58:460-463
4. M. Ustuner, B. Yaprak, K. Teke, et al.Coexisting papillary and clear renal cell carcinoma in the same kidney. Case Reports in Urology, 2014;2014:575181
5. E. Capaccio, V. Varca, A. Simonato, et al. Synchronous parenchymal renal tumors of different histology in the same kidney. acta radiology. 2009; 50:1187-1192

Conflict of interest: None
Funding: None
Cite this Article as: Prashanth A, Manjunath S Anuj M, Kishore N. Dual Malignancy , Single Kidney ; Synchronous Papillary And Clear Cell Carcinoma. Natl J Integr Res Med 2020; Vol.11(1): 85-86