ORIGINAL RESEARCH PAPER
Volume-9 | Issue-4 | April-2020 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

SPORADIC PAPILLARY RENAL CELL CARCINOMA IN A YOUNG FEMALE : A RARE CASE REPORT

Urology

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ABSTRACT

Papillary renal cell carcinoma (PRCC) is a rare carcinoma of the renal tubular epithelium, comprising only 10–15% of all RCC. PRCC rarely occurs before the 4th decade in the absence of family history. We describe a sporadic case of PRCC in a 18-year-old female without family history and risk factors managed Laparoscopically.

KEYWORDS

Papillary renal cell carcinoma, Partial Nephrectomy, Laparoscopy

INTRODUCTION

Papillary renal cell carcinoma (PRCC) is a rare carcinoma of the renal tubular epithelium, comprising only 10–15% of all RCC. The majority of cases occur in the 6th decade of life. PRCC rarely occurs before the 4th decade in the absence of family history . We describe a sporadic case of PRCC in a 18-year-old female without family history and risk factors managed Laparoscopically.

CASE

A 18-year-old female was admitted for Left Flank Pain for 3 months. Radiological studies revealed, 45x40 mm, mass at Left Lower Pole With Moderate Enhancement, and B/L normally excreting Kidneys. RENAL Nephrometry score was calculated to be 7p. She underwent Left Laparoscopic Partial Nephrectomy, with 25 minutes warm ischemia time. Post operative course was uneventful. HPE was S/O Papillary CA with abundant Psammoma bodies, surgical margin was free, ISUP Grade 2 and Stage pT1BN0M0. At 6 months follow up, Renal function and CECT Abdomen was Normal

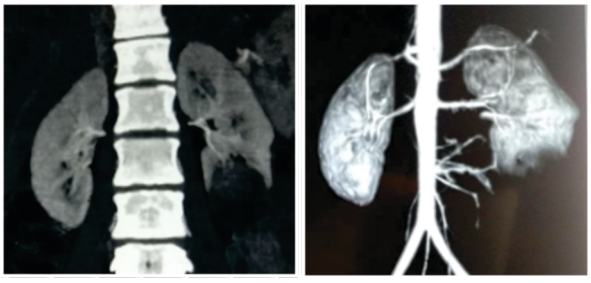

Fig 1 Preoperative Ct with Angiogram

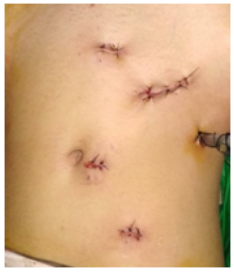

Fig 2 Port Site after Left Lap Partial Nephrectomy

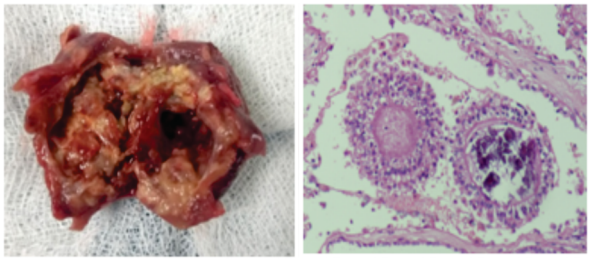

Fig 3 Specimen and Histology of Tumor

DISCUSSION

On average, 10–15% of all cases of RCC are PRCC. The median age at diagnosis of RCC is 64 years [1]. Our patient was diagnosed at the age of 18 years, which is more common in family clusters [1]. However, our patient had negative family history, making this a highly unusual and rare case. PRCC may be sporadic or hereditary [2]. Hereditary forms are associated with mutations in the c-met oncogene, which occurs in only 5–13% of sporadic cases [3]; 75% of sporadic cases of PRCC demonstrate trisomy 7 [4]. Microscopically, type1 PRCC demonstrates papillae covered by single-layered, small cells with pale cytoplasm and round-to-ovoid nuclei, a pattern characteristic of HPRCC but also seen in sporadic cases, ; as in our patient, without features of HPRCC syndrome. In contrast, type 2 tumors show pseudostratifed, large cells with relatively abundant eosinophilic cytoplasm, associated with HPLRCC syndrome.

PN is the standard of care for the management of clinical T1a Renal Tumors and We performed Laparoscopic Partial Nephrectomy in T1b Renal tumor Five-year cancer-specific survival rates for patients with papillary RCC ranges from 86% to 92% [5],. Papillary RCC, and type 1 papillary RCC in particular, carries a better prognosis than clear cell RCC when compared grade for grade and stage for stage.

CONCLUSION

PRCC rarely occurs in the 2nd decade of life and even then, most such early cases occur in family clusters. Laparoscopic Partial Nephrectomy is feasible in T1b Renal Mass.

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