PRIMARY CARCINOID TUMOR OF THE KIDNEY: ARCHIVES REVIEW AND CASE REPORT

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Introduction: Carcinoid tumors are characteristically low-grade malignant tumors with neuroendocrine differentiation. The majority of reported carcinoid tumors are localized in the gastrointestinal tract (74%) and the bronchial system (25%), while less than 1% has been reported in the genitourinary (GU) system. Furthermore, renal carcinoids represent 19% of all GU carcinoid tumors.

Objectives: To review the literature for case reports of primary renal carcinoids, describe epidemiology, natural history, histopathology, management, and prognosis of this condition.

Methods: Extensive literature review was done from the medical literature, including National Cancer Data Base and PubMed.

Results: Less than 91 cases of primary carcinoid tumors of the kidney have been reported in the literature. Mean age of presentation appears to be in younger individuals mean age 48-49 (n=91). Most common presentations were non-specific pain (48%, n=24) and incidental finding on imaging studies (31%, n=24). No preference was observed between right and left side (48%, 45% respectively). All patients with tumor disease more than 7cm (38%, n=24) had either lymph node invasion or metastatic disease.

Conclusions: Renal carcinoid is an extremely rare tumor of the kidney. It is the third most prevalent GU carcinoid in men, and second most prevalent in women. These tumors are usually misdiagnosed due to similarity in presentation as other renal masses. Only 3 patients have been shown to have an increase level of urinary 5-HIAA, all of them presented with metastatic liver disease. Most of the time they display a benign behavior, although tumors over 3cm may show metastatic disease. Good prognostic factors include young age, tumor size less than 4, and extra capsular tumor extension. Nephron sparing surgery should be considered for tumors of 3cm or less, while patients with larger tumors should undergo radical nephrectomy.