

PROGRESSION OF INDETERMINATE PULMONARY NODULES FOUND ON STAGING CT IN RENAL CELL CARCINOMA

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Introduction :Computed tomography (CT) scans of the chest and abdomen are routinely used for staging renal tumours before proceeding to treatment. These often reveal size indeterminate pulmonary nodules (IPN) (<1cm) which may or may not represent metastatic disease. Understanding the likely nature of these lesions may help to better advise patients regarding prognosis and treatment pathway.

Methods :We examined the staging CT, pathology and outcome from prospectively collected data of a single surgeon's series of 184 patients treated surgically for renal cell carcinoma over a 5 year period.

Results: 157 patients had staging CT scans and reports available. 47 (30%) of these had IPN on initial scan. 9 of these have yet to have follow up scans. Of the remaining 38 patients, in 8 (21%) cases the nodules progressed to more obviously represent metastatic disease over a mean period of 20 months (1-60), all had a renal tumour size of >6cm, representing 35% of those patients with >6cm primary renal lesions. No patients with primary tumours of <6cm showed progression of indeterminate nodules.

Conclusions: Indeterminate pulmonary nodules are a common finding in RCC staging CT. Here, with up to 5 year follow-up, 21% were found to represent metastatic disease and were exclusively found in patients where the primary renal tumour was >6cm. Our results would indicate that patients with >6cm renal tumours and indeterminate nodules on staging imaging have a 35% chance of these lesions representing metastatic disease. This finding should be considered when discussing further management of these patients.