



## Metanephric Adenoma

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### Dear sir

Metanephric adenoma / renal epithelial tumor are a cortical epithelial tumor with rare incidence of 0.2% of all epithelial neoplasms<sup>1</sup>. Metanephric adenoma tends to occur more commonly in females with a female:male ratio of 2:1<sup>2</sup>. Tumor is benign<sup>3</sup> and are typically composed of solid, rare cystic components or calcifications with a poorly defined border<sup>4</sup>. Less than 200 cases have been reported (till 2015)<sup>4</sup>. Here we report a case of 20 year old female presented with pain right lumbar region.

A 20 year old female presented with pain (severe and sudden) right lumbar region. On USG and CCET, a tumor involving superior pole of kidney measuring 5x4.7 cm with central necrosis was identified. Right nephrectomy was done and specimen was sent for histopathologic examination. Grossly the size of the kidney was 11x6x3cm, a well circumscribed growth measuring 6x5cm was identified on the upper pole extending upto the middle.

On microscopic examination, a well circumscribed tumor with small, uniform, closely packed tubules accompanied by scant stroma. Cells were cuboidal with minimal cytoplasm, bland nuclei and uniform chromatin. Focal papillary architecture and glomeruloid bodies were also seen. Psammoma bodies were also seen. rest of the renal

tissue appeared normal. All these features were suggestive of metanephric adenoma

Histologically, metanephric adenoma have either sparse fibrous capsule or no capsule at all<sup>1</sup>. Metanephric adenoma overlaps in morphology with epithelial-predominant nephroblastoma in children younger than 12 years and show morphology similar to papillary renal cell carcinoma in adults<sup>5</sup>. Immunohistochemistry plays important role in diagnosis. Metanephric adenoma stains for CD57 and focally for CK7<sup>1</sup>. Though it is benign, few cases of metastatic disease have been reported<sup>6,7</sup>.



Fig. 1: a well circumscribed growth on the upper pole.

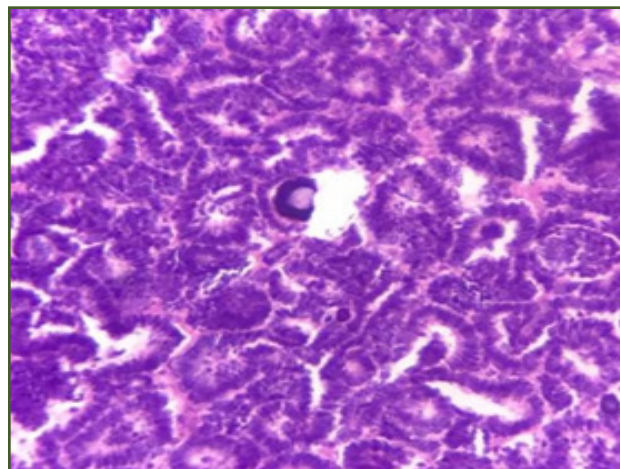


Fig. 2: microscopy, metanephric adenoma with a Psammoma body in the centre.

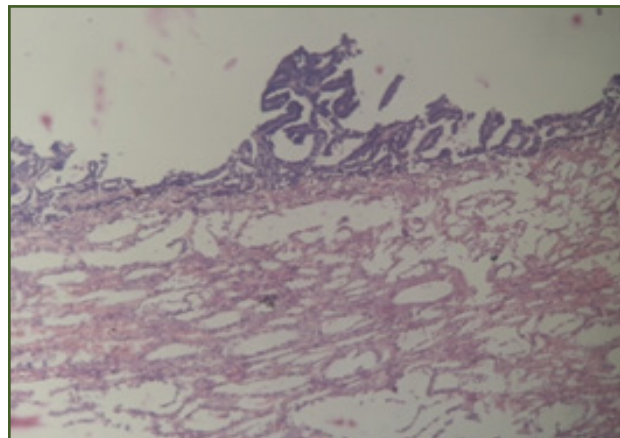


Fig. 3: Focal papillary architecture.

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