



Epidermoid Cyst of Kidney: A Masquerader of Malignancy

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Abstract

Renal cystic masses are although known to occur frequently with varied diverse presentation and symptoms, we report here an exceptionally unusual case in which epidermoid cyst was diagnosed of the left kidney in a 46-year female. She came with the presenting complaints of intermittent pain, dull in nature in the left loin for 8 months. Radiological Imaging was advised which revealed a cystic lesion of left kidney that was thought to be neoplastic. CT guided biopsy was performed from multiple areas of the cyst bearing kidney to ascertain the nature preoperatively. Histopathological evaluation concluded it be an epidermoid cyst of kidney which is very rarely encountered with only a few reported cases in the literature. Better clinical awareness and timely preoperative diagnosis is essential to prevent radical surgery.

Keywords: kidney; cysts; histopathology

Introduction

Epidermoid cysts closely resemble the epidermal inclusion cysts of the skin. Predominantly comprising of a squamous cell lining which produces keratin debris that fills the lumen [1]. Various reported cases of similar cysts are present in internal organs. However, it is rarely encountered in kidneys [1-4]. We present here an unusual case of renal cyst which on histopathology was confirmed to be diagnostic of an epidermoid cyst. also, a review of the existing literature is done of this rare condition.

Case Description

A 46-year-old female presented with clinical complaints of aching pain, dull in nature in the left loin of eight months duration along with hematuria. There was no history of fever or weight loss. USG abdomen showed a complex echotexture area in the left kidney suggestive of a cyst. CT scan abdomen revealed a multiloculated 4.1 x 3.5 cm hyper dense lesion with thickened cyst wall. An initial Provisional diagnosis was made of cystic renal cell carcinoma and CT guided biopsy done for confirmation before considering the decision to go for a partial or radical nephrectomy.

Histopathological evaluation revealed areas of renal parenchyma which were compressed along with tubular thyroid is action and interstitial lymphoid collections along with numerous cysts lined by keratinizing squamous epithelial lining with lamellated keratin. No atypia, dysplasia, or carcinoma was identified in the multiple tissue sections submitted for examination. The final histopathologic report was signed off as epidermoid cyst of kidney with chronic pyelonephritis.

Discussion

The Epidermoid cysts of kidney are an extremely uncommon entity, although their occurrence in the body is frequently encountered, it is rare to encounter epidermoid cysts in the kidney. As postulated by various theories, these cysts occur due to traumatic metaplasia [5,6] or aberrant implantation of ectoderm during the process of embryogenesis [4]. Unfortunately, these have no classically clinical complaints or characteristic features on radiology that would conclusively or provisionally suggest epidermoid cyst and may mimic malignancy [7]. The significant

pathological features are that the cyst is lined by keratinizing stratified squamous epithelial lining with a granular layer filled with keratinous debris that is lamellated.

Conclusion


Renal epidermoid cyst, although rare is a totally benign lesion which may mimic malignancy on radiologic examination and thus may lead to unnecessary nephrectomy. Better clinical awareness of the entity and a preoperative biopsy may help preserve a kidney in cases of cystic renal lesions. Although rare, epidermoid cyst of the kidney is capable of causing serious damage to the kidney leading to non-functioning. Better clinical awareness of this benign entity and timely diagnosis by preoperative biopsy may help preserve a kidney.

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Conflicts of Interest

There are no conflicts of interest.


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