

Mucinous Cystadenoma of Renal Collecting Duct Origin : A Case Report¹

Sang-Hee Choi, M.D., Kyoung-Sik Cho, M.D.²

We report a case of mucinous epithelial tumor (mucinous cystadenoma) in the renal pelvis. This type of tumor shows a non-specific cystic mass, and sometimes has wall calcification, it very rarely originates in multi-potential renal pelvic epithelium. We report the imaging findings of the tumor and review the previous literature.

Index Words : Kidney neoplasms, diagnosis
Kidney neoplasms, CT

A 47-year-old woman was admitted due to indigestion and the palpable mass on the left abdomen. On physical examination, mass was not found to be firm or tender. The patient had undergone an appendectomy and hysterectomy several years previously. Intravenous pyelography showed a large filling defect on the lower pole of the left kidney, its wall was margined, and calcification was thin and even (Fig. 1). On contrast enhanced abdominal computed tomography, a round homogeneous hypoattenuated cystic mass with marginal calcification was noted on the lower pole of left kidney (Fig. 2). Total nephrectomy was performed, and a turbid yellowish fluid was aspirated from the cyst. The mass was confirmed to be a renal mucinous cystadenoma.

Of the tumors originating from the renal pelvis and collecting system, nearly 90% are transitional cell carcinomas and the remaining 10% are squamous cell carcinomas(3). Adenocarcinoma arising from the renal pelvis is rare, accounting for less than 1% of all epithelial tumors found in that region(1). Any chronic irritation to the epithelium can cause both squamous and glandular metaplasia(2, 3). It is known that pathologically, the adenocarcinoma shows a pronounced desmoplastic response, with abundant mucin produ-

ction as well as marked cytologic atypia of the collecting duct epithelium throughout the kidney. The mucin is wholly interstitial or intratubular suggesting a fibroblastic origin as a part of a desmoplastic response. When a primary or metastatic mucinous adenocarcinoma and an atypical primary renal adenocarcinoma are differentially diagnosed, it is important to distinguish epithelial and interstitial mucin. Benign cystadenoma originating from the renal pelvis is much rarer, but a case arising from horseshoe kidney has been reported(1). The cystic renal neoplasm is lined with benign mucin-secreting epithelium, and the similarity of this lesion to mucinous cystadenoma of the

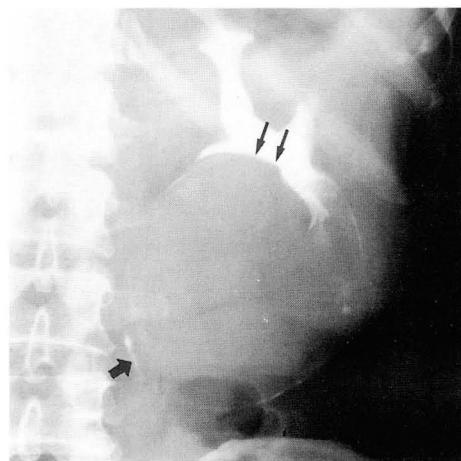


Fig. 1. Intravenous pyelography shows a large filling defect on the lower pole of left kidney. The lower pole calyces and renal pelvis of left kidney are compressed by large filling defect (arrows). Its wall is margined with even thin calcification (arrow).

¹Department of Radiology, Samsung Medical Center College of Medicine, Sung Kyun Kwan University

²Department of Radiology, Asan Medical Center, University of Ulsan, College of Medicine

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Address reprint requests to : Sang-Hee Choi, M.D., Department of Radiology, Samsung Medical Center College of Medicine, Sung Kyun Kwan University # 50 Irwon-dong, Kangnam-ku, Seoul 135-230, South Korea.

Tel. 82-2-3410-2518 Fax. 82-2-3410-2559

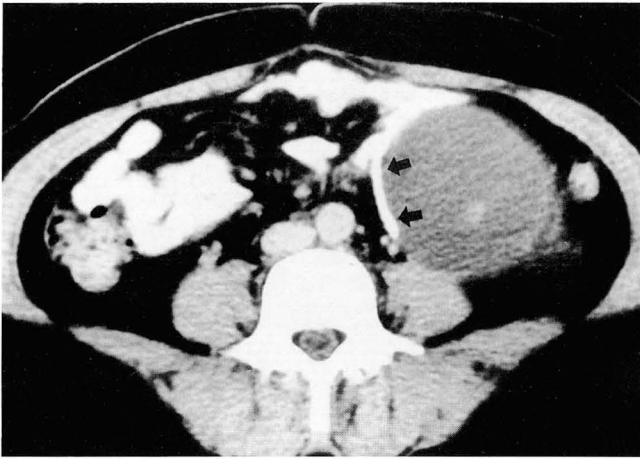


Fig. 2. On contrast enhanced abdominal computed tomography, a round homogeneous hypoattenuated cystic mass with marginal calcification (arrows) is noted on the lower pole of left kidney.

ovary suggests the possibility of a similar histogenesis (1). Because of biologic atypia, the prognosis appears to be poor. Mucinous cystadenoma arising from the renal

pelvis is an uncommon tumor and shows salient features, namely, chronicity of presenting symptoms, association with infectious or inflammatory conditions and renal calculi(3). When a cystic mass with calcification of the renal pelvis and these salient features is encountered, the mucinous cystadenoma and mucinous cystadenocarcinoma must be differentiated. In this report, we also describe the radiologic findings and review the literature.

References

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신 집합관에서 발생한 점액성 낭선종: 1예 보고¹

¹성균관대학교 의과대학 진단방사선과학교실

최 상 희 · 조 경 식

여러 종류의 세포로 발생이 가능한 신우 상피세포에서 유래한 1차성 점액성 신 낭선종은 아주 드물다. 점액성 신 낭선종은 비특이적인 낭종의 형태로 나타나고 가끔 석회화도 동반한다. 저자들은 드문 점액성 신 낭선종 1예를 경험하여 방사선학적 소견과 문헌을 보고하고자 한다.