COLLECTING DUCT CARCINOMA A RARE CASE REPORT

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Abstract:
Carcinoma of the collecting ducts of Bel-lini is a relatively rare subtype of RCC, accounting for less than 1% of all RCCs (range, 0.4%-1.8%). Since, its origin is from collecting duct of the renal tubules which is closer to the renal pelvis and it may share features in common with transitional cell carcinoma of the renal pelvis.

45 year old postmenopausal woman presented with right loin pain, hematuria for one month duration. On examination, patient's abdomen and genital examination were normal. Investigations revealed plenty of RBCs in the urine whereas cytology was negative. USG Abdomen showed 3x3cm hypoechoic mass lesion in the pelvis of the right kidney. PCS, CMD were normal. CECT KUB showed 3X3cm heterodense mass lesion, with minimal contrast enhancement in the Right renal pelvis and the Left kidney, bladder were normal. Cystoscopy showed normal bladder and Right RGP showed 3X3cm size filling defect in the pelvis in prone film. Diagnosed as Right Renal pelvic TCC,

Right Radical Nephroureterectomy with cuff of bladder done. Histopathological report came as well differentiated Collecting duct Carcinoma and her postoperative period was uneventful.

Keyword: Collecting duct of Bellini, Transitional cell carcinoma (TCC)

Introduction:
Carcinoma of the collecting ducts of Bellini is a relatively rare subtype of RCC, accounting for less than 1% of all RCCs (range, 0.4%-1.8%). Since, its origin is from the collecting duct of renal tubules which is closer to the renal pelvis, it may share features in common with transitional cell carcinoma of the renal pelvis.

Case presentation:
45 year old postmenopausal woman presented with right loin pain, hematuria for one month duration. On examination, patient was moderately built and nourished, had pallor and stable vitals. Per abdomen and genital examination were normal. Investigations revealed plenty of RBCs in the urine where as cytology was...
negative. USG Abdomen showed 3x3cm hypoechoic mass lesion in the right renal pelvis and PCS, CMD were normal and Left Kidney, bladder, other organs appeared normal. CECT KUB (fig 1, fig 2) showed 3X3cm heterodense mass lesion, contrast enhancement with low intensity in the pelvic region of Right Kidney and Left kidney, Bladder were normal. Cystoscopy showed normal bladder and Right RGP showed-3X3cm size filling defect in the renal pelvis in prone film (fig 3) and diagnosed as right renal pelvic transitional cell carcinoma.

**Treatment:**
Right Radical Nephroureterectomy with cuff of bladder was done (fig 4, fig 5). Histopathological report (fig 6, fig 7) came as well differentiated Collecting duct carcinoma –dilated tubules and papillary structures typically lined by a single layer of cuboidal cells, often creating a cobblestone appearance. Her postoperative period was uneventful. Adjuvant chemotherapy - cisplatin was given in the postoperative period.
**Discussion:**
Whenever there is a central mass lesion, though the possible diagnosis of TCC is more common, at times as in our case the rare type of collecting duct RCC which appears abutting the renal pelvis should be kept in mind as the latter has a very dismal prognosis. Most reported cases of collecting duct carcinoma have been high grade, advanced stage and it may share features in common with transitional carcinoma of renal pelvis. Some patients may have responded to cisplatin or gemcitabine based chemotherapy. Since renal cell carcinomas develop from the proximal tubules, they have high levels of expression of multidrug resistance protein-p glycoprotein and are therefore resistant to most forms of chemotherapy. Because of the collecting duct carcinoma origin is closer to the renal pelvis it may respond to chemotherapy like TCC of the renal pelvis.

**CONCLUSION:**
A central hilar mass lesion, although the possible diagnosis of TCC is more common, the rare type of collecting duct RCC which appears abutting the renal pelvis should be kept in mind.

**References;**
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