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#### Dr. Preeti Sharma

Department of Surgery, PJLNGMC, Chamba, Himachal Pradesh, India

### Dr. Loveleen Mahajan

Department of Surgery, Netaji Subhash Chandra Bose Zonal Hospital, Mandi, Himachal Pradesh, India

#### Dr. Arun Chauhan

Department of Surgery, IGMC, Shimla, Himachal Pradesh, India

# Renal squamous cell carcinoma: A case report

## Dr. Preeti Sharma, Dr. Loveleen Mahajan and Dr. Arun Chauhan

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#### Abstract

Primary squamous cell carcinoma of kidney is very rare finding and is rarely reported in literature. The disease is very aggressive in nature and carries poor prognosis with 5yr survival rate of <10%. We report here a case of 48yr old female who presented with complaints of pain in left side of abdomen, intermittent fever and was diagnosed with squamous cell carcinoma of kidney. The patient underwent radical nephrectomy.

Keywords: Renal squamous cell carcinoma, urothelial cancers, pathognomonic sign and symptom

### Introduction

Primary renal squamous cell carcinoma is a rare cancer with a variable incidence of about .5 – 15% of all urothelial cancers. Due to absence of any pathognomonic sign and symptom, radiological imaging is often delayed and patient presents in advanced stages. Common etiological factors are renal calculi, infection, radiotherapy, endogenous and exogenous chemicals and vitamin A deficiency [1]. But cases are seen even in absence of any etiological factor. We report a case of 48yr old female with Renal SCC.

### Case

48yr old female smoker, non-alcoholic presented in emergency department with complaints of pain in left flank from past 3 months and fever. On examination a lump was palpable in left lumbar region approx. 10x5 cm, tender with ill-defined margins, firm too hard in consistency and limited movement with respiration.

Blood investigations showed severe anemia hb-6g/dl.

USG showed enlarged, grossly distended left kidney with few heterogeneous hypoechoic lesions, multiple calculi and calcification with adjacent cystic lesion. First possibility -neoplastic etiology.

CECT Abdomen showed bulky left kidney with multiple large calculi in all the calyces along with left PUJ chronic calculus. Moderately hydro nephrotic left kidney with classical bear paw sign was mentioned.

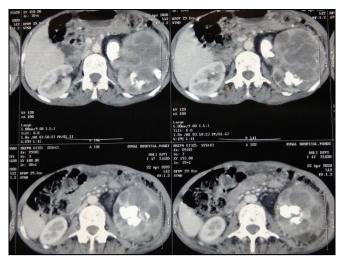
The patient was taken up for surgery after workup. Patient underwent left radical nephrectomy. Intraoperatively kidney was grossly enlarged approx. 15x10x15 cm. In size. There was a lymph nodal mass of 5x5 cm in its vicinity. After slitting the specimen it showed kidney filled with multiple calculi and caseous material.

Postoperatively patient recovered satisfactorily.

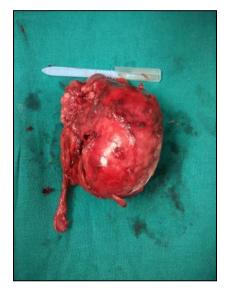
Histopathological findings were suggestive of well differentiated Squamous cell carcinoma left renal mass. Along with:

- Invasion into renal vessels.
- Capsular invasion and invasion into perinephric tissue.
- Free distal ureteric margins.

Corresponding Author:
Dr. Preeti Sharma
Department of Surgery,
PJLNGMC, Chamba, Himachal
Pradesh, India



(A) CT image: Bulky left kidney (14x10 cm) with multiple large calculi and left PUJ calculus along with enlarged pararenal nodes.



(B) Nephrectomy specimen



(C) Cut section of nephrectomy specimen showing kidney filled with multiple calculi and grey yellow tumour.

# Discussion

Common cancer of urological origin are prostate, bladder and kidney. Clear cell carcinoma is the most common subtype (70-80%) of Renal cell carcinoma followed by papillary (10-15% of

RCC) and chromophobe (3-5%) of RCC <sup>[1]</sup>. SCC are decidedly rare neoplasms arising from renal pelvis with an incidence of 0.7 to 7% of upper urinary tract cancers <sup>[2, 3]</sup>. It is often associated with abuse of analgesics and presence of chronic inflammation <sup>[4]</sup>. The incidence of SCC is 6 times higher in renal pelvis than in the ureter. SCCs are usually moderately to poorly differentiated and already invasive at presentation.

Due to non-specific and insidious onset symptoms such as flank pain, hematuria, which often overlap with symptoms of renal stones, lack of specific radiological features, and rarity of this tumour, most cases of RSCC come to light only after histopathological examination of nephrectomy specimen. Hence most of the patients present at late stages usually with metastasis accounting for poor prognosis.

Considering the rarity of this disease, careful history taking may give a clue about risk factors for SCC of kidney. Standard care remains the same with radical nephrectomy for the pathology

### Conclusion

Primary RSCC are rare tumours and show a strong association with renal stones, which might delay diagnosis and first indication of malignancy comes from HPE of non-functioning calculous kidney. This emphasizes the necessity of prompt treatment of renal stones and assessment for malignancy in patients with long standing renal calculi.

### **Conflict of Interest**

Not available

### **Financial Support**

Not available

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### **How to Cite This Article**

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