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Renal Cell Carcinoma Presenting as a Cutaneous Horn

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Abstract:

Renal-cell carcinoma develops as an insidious neoplasm, frequently metastasizing to the skin. Cutaneous manifestations vary regarding morphology and sites of predilection. A patient was recently seen demonstrating a metastasis from a renal neoplasm. The lesion was unusual in that it grossly resembled a cutaneous horn. Dermatologists should continue to be alert to the possibility of renal tumor metastasis when evaluating cutaneous tumors.

KEYWORDS: Rcc, Cutaneous Horn, Metastasis, Renal Cell Carcinoma, Skin Metastasis.

INTRODUCTION:

Cutaneous horns are uncommon lesions consisting of keratotic material resembling that of an animal horn typically occurring over the sun exposed areas of body like face, nose, head and arms which are usually benign lesions consisting of keratin mounds but may harbour Squamous Cell Carcinoma in upto 20% cases.

Renal cell carcinoma accounts for 2% to 3% of all adult malignant neoplasms and most commonly metastasize to lung (45%), followed by bone (30%) and lymph node (22%).

Cutaneous metastasis of renal cell carcinoma is a rare. presentation seen at the rate of 1-3.3% mostly as skin nodules

CASE REPORT O PATIENT DETAILS

55 year old male, no co-morbiditites

C/C- two horn like growths over his chin and scalp for past 4 months which was painless and gradually progressive in size.

Past history: known C/O RCC for 6 years

O EXAMINATION

Vitals stable

Abdomen: intra-abdominal lump of size 8x10 cm present in right hypochondrium and lumbar regions neither ballotable nor bi-manually palpable.

There was presence of 2 cutaneous horns, one over the lower lip and other over parietal region of scalp of size approximately 4x2 cm and 5x2 cm respectively.

o INVESTIGATIONS



Blood investigations: WNL

<u>CECT Abdomen</u>: a lobulated mass of size $14 \times 13.5 \times 14.3$ cm in right kidney arising from upper and interpolar region with central necrosis and multiple foci of coarse calcification within it abutting right lobe of liver anteriorly; Aorta, IVC and portal vein towards the left and infilterating right diaphragmatic crura medially. Scanned lung fields showed multiple soft tissue nodules- likely metastasis.

O MANAGEMENT

Patient underwent wide local excision of the cutaneous horn over the lower lip with H-plasty.Patient was started on T. Sunitinib (50mg) and discharged on follow-up.HPE Report showed tumor epithelial cells arranged in loose clusters and groups having central to eccentric round nuclei and moderate to abundantly finely vacuolated cytoplasm in background of benign and reactive squamous cells suggestive of adenocarcinoma- metastatic deposits of renal cell carcinoma.On follow up there was a significant reduction in size of the cutaneous horn over the scalp s/o response of tumor to sunitinib.

DISCUSSION

- A cutaneous horn (cornucutaneum) is a hard conical projection from the skin, made of compact keratin. Most of the cutaneous horns have benign base, but some may have premalignant or a malignant base.
- Most common underlying lesions are seborrheic keratosis, viral warts (due to HPV), Actinic keratosis and well differentiated squamous cell carcinoma. Giant cutaneous horns of the lip are relatively rarer and malignancies associated with them are even more uncommon.

Skin metastases of urogenital tumors are less frequent and is observed approximately 3.4% in renal tumors, 0.84% in bladder tumors, 0.36% in prostate tumors and 0.4% in testicular tumors.

The skin metastasis of RCC is often in form of papules, plaques or nodules. The lesions are usually milimetric in size but may be upto a few centimeters in size.

Patients with metastatic RCC generally have a poor prognosis and skin metastasis is usually a late presentation.

Cytoreductive nephrectomy can be used in patients with metastatic disease especially if there is substantial disease volume at the primary site but only a low burden of metastatic disease.

• Systemic therapy is recommended to RCC with systemic spread. Due to poor performance status and multiple metastasis to skin and lungs and locally advanced nature of the tumor our patient was started on systemic chemotherapy and advised follow-up.

CONCLUSION

Skin metastasis in renal cell carcinoma is though a rare entity and mostly presents as cutaneous nodules or papules, cutaneous horn may also be a form of presentation. Any patient presenting as a cutaneous horn may be harbouring an underlying malignancy that needs to be worked upon.

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Fig:1 Cutaneous horn over lower lip



Fig 2: Cut. horn over scalp

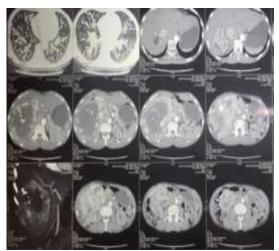


Fig 3: CECT Abdomen image showing renal mass



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Fig 4: Post op image after removal of horn over lipwith pulmonary nodules