

## Poorly Differentiated Neuroendocrine Tumor of the Bladder: A Case Report

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### ABSTRACT

Neuroendocrine tumors rarely occur in the urinary bladder, relatively less than 1% of occurrence, as the tumor is very rare, pathogenesis is uncertain some authors showed that it is from urothelial origin. It can be carcinomatous, subdivided into small cell and large cell pathology. Small cell carcinoma of the bladder is a rarity that may present at an advanced pathologic stage. No treatment regimens have been standardized for local or metastatic disease. Many publications showed that the disease is treated with combined chemotherapy or with radical cystectomy, here we are presenting a case of a 78 years old male, who underwent transurethral resection of bladder 1 month ago and the biopsy report was suggestive of neuroendocrine tumor of bladder, after that patient underwent radical cystectomy with neobladder reconstruction surgery.

### ARTICLE DETAILS

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### INTRODUCTION

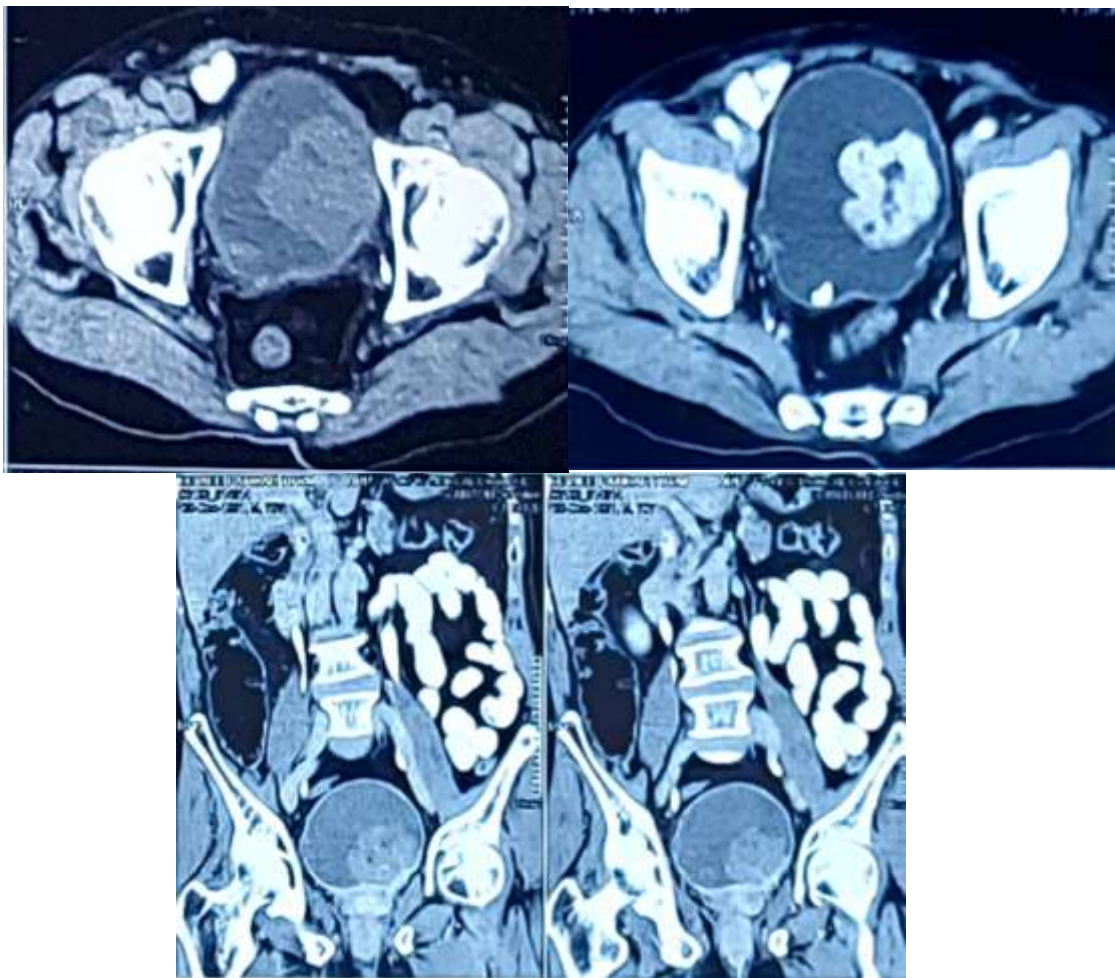
Bladder cancer is the 6<sup>th</sup> most frequent neoplasm in men and 17<sup>th</sup> most frequent in women. It's annual incidence is increased from 430000 cases in 2012 to 550000 in 2018. Lebanon was found to have the world's highest rate of bladder cancer<sup>1</sup>. According to world health organization classification, 90% of cancers are urothelial and 5% are squamous cell carcinoma. Neuroendocrine tumours are very rare tumours occurring in the urinary bladder. Although they only comprise 0.35–1% of all bladder tumors, these tumors can be divided into carcinoid, neuroendocrine carcinoma, or mixed histology. The high-grade neuroendocrine carcinomas can further be subdivided into large cell and small cell classes. Small cell carcinoma are the most common and, and the large cell neuroendocrine tumour is the rarest<sup>2</sup>. Less than 40 cases are published in literature so far. The most common presentation of the tumour is old age men with gross haematuria and with the history of chronic smoking at an advance stage with poor prognosis.

### CASE PRESENTATION

A 70 year old male came to urology outdoor with complaints of LUTS and haematuria since 6 months but since last 5 days patient was having gross haematuria, patient was a chronic smoker, he does not have any familial history of any urinary bladder carcinoma or any other cancer in the family. He underwent routine investigations and his CT scan of abdomen and pelvis suggestive of heterogeneously enhancing

lobulated polypoidal soft tissue density mass, measuring around 62x50x61 mm with internal few necrotic areas arising from the left posterior-lateral wall of urinary bladder close to left VUJ and extending up to the base of the urinary bladder, suggestive of malignant urinary bladder mass, then on cystoscopy, it was observed that around 1.5 cms size of solitary vesical calculus along with huge solid urinary bladder mass involving an anterior wall, bilateral lateral wall, and dome of the bladder. Than patient underwent trans urethral resection of the bladder tumour along with cystolithotripsy, biopsy was taken and has been sent for HPE. After that patient get symptomatic relive and the biopsy report have shown the malignant cells, patient underwent radical cystectomy with neo bladder reconstruction under general anaesthesia and the excised specimen has been sent for HPE examination and immunohistochemistry.

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### DISCUSSION

The neuroendocrine tumor of the bladder is very rare in incidence and mostly the patient of the particular diseases presents in the later stage after the disease extends. More commonly the patient presents with advanced tumor with metastasis in the various parts of the body, but here we found a patient who came in the early stage where the tumor spread was found within the organ itself. We decided to undergo partial transurethral resection of bladder tumor (TURBT) (because the tumor was involving the bladder wall(T3)), and Cystolithotripsy (CLT) for the calculus of around 1.5cms present in the bladder. We have sent tissues for the histopathological examination (HPE) examination which shows the malignant growth of the tissue, and possibly of neuroendocrine tumor of the bladder. After this, we planned for the radical cystectomy along with neo bladder

reconstruction. This is a very rare bladder tumor, in these tumors, there is no such role of chemo or radiotherapy, and more importantly, the tumor was not metastatic in nature. For the confirmation, we have sent the tissues for an immunohistochemistry (IHC) study, which shows Synaptophysin (GR 007) few cells positive. Patient was discharged on the 9<sup>th</sup> postoperative day.

### REFERENCES

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