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Lymphoepithelioma Like Carcinoma of Urinary Bladder - A Rare Case Report

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Abstract: ***Lymphoepithelioma like carcinoma (LELCA) of urinary bladder(UB)is a rare variant of bladder cancer, characterized by malignant epithelial component densely infilterated by lymphoid cells and the malignant epithelial component characterized by indistinct cytoplasmic border, vesicular nuclei, prominent nucleoli arranged in syncytial growth pattern , which are cytokeratin marker positive on immunohistochemistry. These neoplasms must deserve attention and recognition as their definitive management has yet to be established and most of the study shows them chemotherapy responsive .We here represent a case study of 72 years old male presented with gross hematuria since one and half month. On CECT a mass was seen at lateral wall of UB. Tras urethral resection of UB was done and histopathalogical examination was carried out on this tissue showing LELCA along with few areas poorly differentiated urothelial carcinoma invading muscle. Immunohistochemistry show cytokeratin positivity.***

Keywords: Lymhoepithelioma Like Carcinoma (LELCA), Urinary bladder (UB), Epithelial component, Syncytial growth pattern

1. Introduction

Lyphoepithelioma is a term used to designate an undifferentiated malignant epithelial tumor of nasopharynx that is histologically distinctive because of markedly prominent lymphoid infilterate along with sheets of undifferentiated pleomorphic cells in syncytial pattern. Carcinoma with similar histological features arising outside nasopharynx are called Lymphoepithelioma like carcinoma (LELCA). It occurs in organs such as salivary gland, cervix, thymus, lung, skin, stomach, breast [1]. But rare in urinary bladder (UB). In UB, it is ebstein bar virus negative. Around 90% of malignant tumor of UB are urothelial carcinoma (UC), remaining 10% are other type including this rare type whose incidence is in between 0.4% to 1.3%. It is commonly associated with component of conventional UC, pure form is rare and outcome in such cases is similar to that of conventional UC [2]. Due to its rarity in UB and generally misinterpretated as lymphoma, we here described a case report on it.

2. Case Report

A 72 years old male presented with complaints of hematuria since one and half months. He was a follow up case of carcinoma right pyriform fossa diagnosed six years back and for which he received chemotherapy and radiotherapy and emergency tracheostomy done for the same and cured also.
Urinalysis for hematuria done: on microscopic urine examination RBC was seen only. No malignant cells seen. Renal and Liver function test and complete blood counts, bleeding and clotting time are within normal range.

EBV test is negative
On radiological examination CECT, evidence of heterogenous enhancing polypoidal soft tissue density mass lesion seen arising from lateral wall of UB measuring approximately 50mm*29mm*52mm. There is no evidence of hydronephrosis.

Tras-urethral resection of UB was done and tissue send for histophological examination.

On microscopic examination most of the tissue areas show features resembling undifferentiated nasopharyngeal carcinoma, epithelial cells have large vesicular nuclei with prominent nucleoli and having high mitotic activity arranged in syncytial clusters or isolated with in a prominent lymphoid stroma mixed with plasma cells. These also invade muscularis propria. In some areas of section invasive urothelial carcinoma also seen. Final diagnosis of predominantly lymphoepithelial like carcinoma with urothelial carcinoma invading muscularis propia was made out and IHC was done for its confirmation which shows cytokeratin positivity for tumor epithelial cells and also show positivity for lymphoid cell markers[microscopic images shown in figure 2A, 2B).

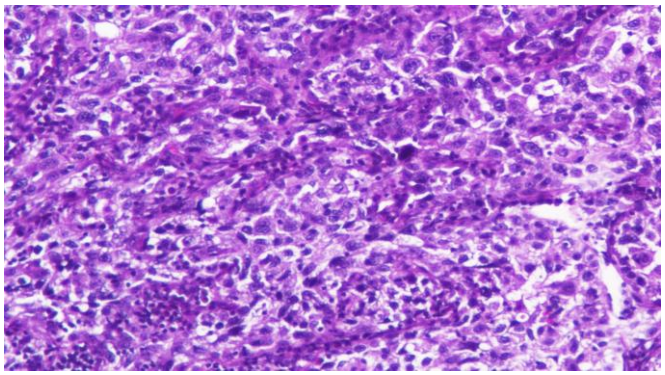

Figure 2 (a): A shows microscopic epithelial cells in syncytial pattern along with lymphocytic stroma

3. Discussion

LELCA is a rare variant of urothelial carcinoma throughout urinary tract, resembling undifferentiated nasopharyngeal carcinoma but EBV negative. It was first reported in 1991 by Zuckerberg et al in bladder as a part of a series of carcinoma

simulating lymphoma[3]. Its incidence varies from 0.4%-1.3% of all bladder carcinoma but also described in upper ureter and renal pelvis [4]. In the bladder it is more common in late adulthood with mean age 70 years and male predominance [5].Grossly it is a solitary mass lesion usually measured 1-5cm in size and clinically it presents as with other UC as painless gross hematuria. As suggested by Amin et al [6], LELCA was categorized as pure(100%), predominantly(>50%) or focal(<50%). Some authors have suggested that LELCA of the bladder represent a distinct entity that is more likely to respond to radiation therapy and platinum based chemotherapy particularly for those tumors composed almost entirely of this histology. Too few cases have been described to support this hypothesis and also recent reports shows that LELCA are commonly associated with a component of conventional UC and outcome in such cases is similar to that of conventional UC [1,2]. In our case chemotherapy is given and it show good response to it. LELCA must be differentiated from florid chronic cystitis, small neuroendocrine carcinoma, poorly differentiated squamous cell carcinoma, lymphoma. To differentiate it from lymphoma IHC studies play major role. It should also be differentiated from poorly differentiated UC with prominent lymphocyte reaction as later lacks syncytial growth pattern of tumor cells.

4. Conclusion

LELCA of bladder is a rare tumor and it is important to differentiate it with other tumors especially lymphoma of bladder, in later IHC study show cytokeratin marker negative. There is no specific guidelines regarding its management and it is necessary to establish its definitive standard of treatment.

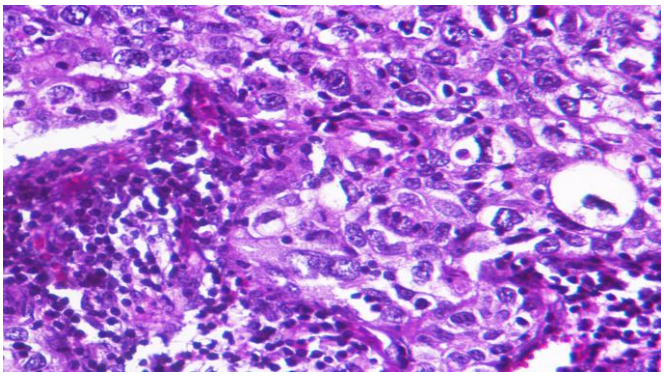

Figure 2 (b): shows microscopic high power view of epithelial cells having vesicular nucleus prominent nucleoli, high N:C ratio in lymphocytic stroma

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