Case Report **OPEN ACCESS**

Lymphoepithelioma – like carcinoma of the bladder in a North African man: a case report

Amel Trabelsi, Soumaya Ben Abdelkrim, Soumaya Rammeh, Wided Stita, Badreddine Sriha, Moncef Mokni, Sadok Korbi

Department of Pathology, Farhat Hached University Hospital, Sousse, Tunisia.

Citation: Trabelsi A, Ben Abdelkrim S, Rammeh S, Stita W, Sriha B, Mokni M, Korbi S. Lymphoepithelioma - like carcinoma of the bladder in a North African man: a case report. **North Am J Med Sci** 2009; 1: 375-376.
Availability: www.najms.org
ISSN: 1947 – 2714

Abstract

Context: Lymphoepithelioma - like carcinoma of the bladder is an extremely rare tumour. We discuss through a new case and a review of the literature the pathological pattern and the management of this uncommon entity. **Case report:** We report the case of a 58 year-old man who presented with a macroscopic hematuria. Transurethral bladder resection was consistent with the diagnostic of a poorly differentiated carcinoma infiltrating the bladder's muscle. A radical cysto-prostatectomy was performed. The pathological examination revealed an EBV negative lymphoepithelioma-like carcinoma of the bladder. **Conclusion**: Lymphoepithelioma-like carcinoma of the bladder is a rare bladder cancer that is important to recognize since it has a favourable prognosis.

Keywords: Bladder, lymphoepithelioma – like carcinoma, immunohistochemistry.

Correspondence to: Department of Pathology, Farhat Hached hospital, Sousse, 4000, Tunisia. Tel.: 21699326546, Fax: 21673226702. Email: benabdelkrims@voila.fr

Introduction

Lymphoepithelioma-like carcinoma is a malignant epithelial neoplasm densely infiltrated by lymphoid cells. It is characterized by indistinct cytoplasmic borders and a syncitial growth pattern. The most frequent location is the nasopharynx. Identical tumours have been rarely described in the bladder. About 50 cases have been reported in the English literature.

Case Report

A 58 year-old North African man presented with a macroscopic hematuria of two weeks' duration. Cystoscopy showed a 4 x 4 cm sessile mass in the bladder. Pathologic examination of the transurethral bladder resection was consistent with the diagnostic of poorly differentiated carcinoma infiltrating the muscle of the bladder and a radical cysto-prostatectomy was performed.

Grossly, there was a well demarcated tumour in the dome that measured 2 x 3 x1 cm. Microscopic examination showed an undifferentiated carcinoma with a lymphoid stroma. Tumour cells were characterized by a syncytial growth pattern in a dense lymphoid stroma (Fig. 1, 2).

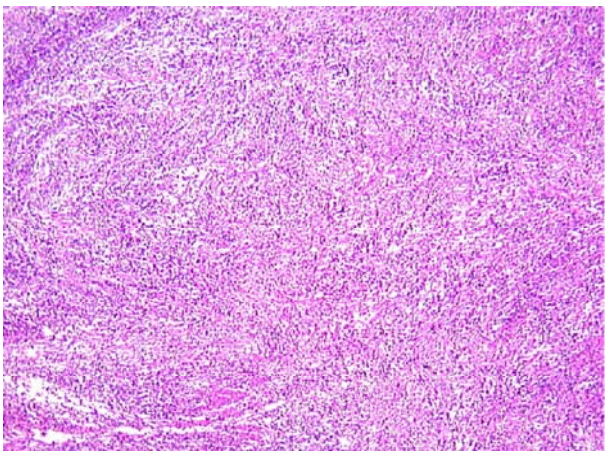

Fig. 1 Malignant cells having a syncytial appearance in a lymphoid stroma (hematoxylin-eosin, original magnification x100).

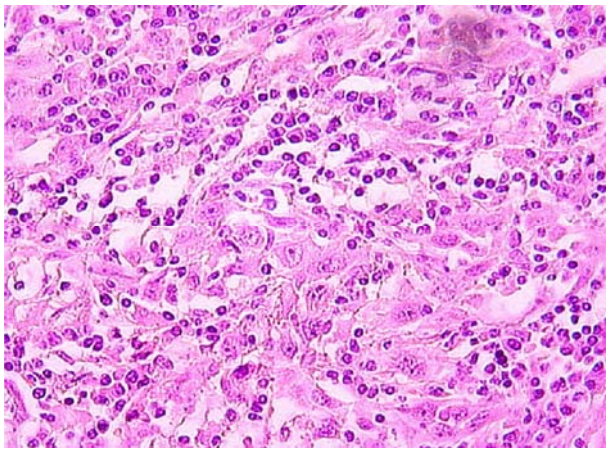

Fig. 2 Anaplastic cells with vesicular nuclei and prominent nucleoli (hematoxylin-eosin, original magnification x 400).

Immunohistochemically, most of the tumour cells were positive for Epithelial Membrane Antigen (EMA) and cytokeratin. The surrounding cellular infiltrate was a mixture of B and T lymphocytes. Hybridization to Epsteïn – Barr Virus encoded RNA was negative. The patient remained alive and disease free eight months after the diagnosis (Fig. 3).

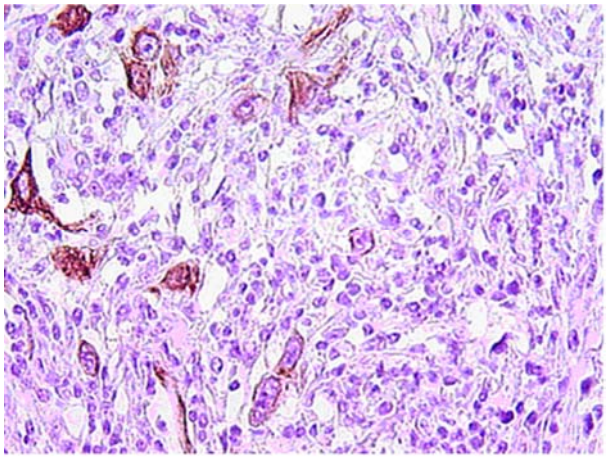

Fig. 3 Tumour cells are positive with EMA (immunohistochemistry, original magnification x 400).

Discussion

Lymphoepithelioma – like carcinoma (LELC) of the bladder is an extremely rare tumour that was first reported by Zukerberg et al in 1991 (1) and since that time, about 50 cases have been reported in the English literature (2).

LELC of the bladder is characterized by a syncytial growth pattern of the malignant epithelial cells, indistinct cytoplasmic borders and a non-neoplastic lymphocytic infiltration.

According to the proportional expression of lymphoepithelial elements in the tumour mass, tumours are categorized as pure (all lymph epithelial elements), predominant (more than a half) or focal (less than a half) (3).

The origin of bladder LELC is unknown; they probably represent modified urothelial basal cells (4). Unlike undifferentiated nasopharyngeal carcinomas, the LELC of the bladder were uniformly Epstein-BarrVirus (EBV) negative in western and Asian patients (5, 6), and also in our case.

Histologically, the LELC of the bladder must be distinguished from large cell lymphomas which are usually metastatic (7), but the immunohistochemical findings using cytokeratin and EMA are invaluable to confirm their epithelial origin (7). Moreover, identification of a polyclonal lymphoid population is controversial in the diagnosis of lymphoma (7); immunohistochemistry can be used to detect the malignant epithelial cells in the inflammatory elements and to exclude the diagnosis of chronic cystitis (7).

The LELC has a relatively favourable prognosis (3, 4, 7) which is attributed to the intense immunological response of the host against the neoplasm (3); moreover, the inflammatory infiltration causes early symptoms like macroscopic hematuria alerting the patient promptly (4).

The appropriate management of LELC of the bladder is not unified. The combination of transurethral resection of the bladder and adjuvant chemotherapy is probably effective against LELC, particularly in the pure form and focal forms, avoiding radical cystectomy (1, 3, 4).

In the present case, the patient was treated by radical cystectomy without adjuvant chemotherapy.

References

1. Zukerberg LR, Harris NL, Young RH. Carcinomas of the urinary bladder simulating malignant lymphoma. Am J Surg Path 1991; 15: 569.
2. Yaqoob N, Kayani N, Piryani J, Sulaiman MN, Hasan SH. Lymphoepithelioma-like carcinoma of the urinary bladder: (LELCA). J Pak Med Assoc 2005; 55: 402-403.
3. Amin BM, Ro JY, Lee KM, et al. Lymphoepithelioma-like carcinoma of the urinary bladder. Am J Surg Pathol 1994; 18: 466-473.
4. Holmang S, Borghede G, Johansson SL. Bladder carcinoma with lymphoepithelioma- like differentiation: a report of 9 cases. J Urol 1998; 159: 779-782.
5. Chen KC, Chiang HS, Fang CL. EBER expression of pure urinary carcinoma in two unique Asian patients. Urol Int 2005; 74: 280-282.
6. Gulley ML, Amin MB, Nicholls JM, et al. Eptein-Barr virus is detected in undifferentiated nasopharyngeal carcinoma but not in lymphoepithlioma-like carcinoma of the urinary bladder. Hum Pathol 1995; 26: 1207-1214.
7. Constantinides C, Giannopoulos A, Kyriakou G, et al. lymphoepithelioma- like Carcinoma of the bladder: a case report. BJU Int 2001; 8: 121-122.