

Oncology

About a case of lymphoepithelioma-like carcinoma of the bladder

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Introduction

Lymphoepitheliomas are undifferentiated malignant epithelial tumors of the nasopharynx which are recognized histologically by lymphocytic infiltration suggesting an important malignant lymphoma. Tumors of similar histological type have been described in other sites outside of the nasopharynx (lung, stomach, cervix, skin) and are known as lymphoepithelioma-like carcinomas (LELC). The LELC is a tumor that rarely reaches the urinary tract.

Case report

A 71-year-old man had a history of chronic smoking. He reported a hematuria 2 months ago. His physical examination was normal. Ultrasounds revealed an intravesical echogenic image localized at the left-side wall of his bladder measuring 30 mm × 22 mm (Fig. 1). A transurethral resection of the bladder tumor was performed. A pathological examination revealed a proliferation of cells with large vesicular nuclei, nucleoli and high mitotic activity. These cells were either arranged in syncytial clusters or isolated within a predominant lymphoid stroma (Fig. 2). This proliferation infiltrated muscle. An immunohistochemical examination (cytokeratin positivity) confirmed the diagnosis of LELC of the bladder (Fig. 3). Chest and abdominopelvic computed tomography (CT) did not show pelvic lymphadenopathy or secondary location. A radical surgery was then decided without neoadjuvant therapy. Cystoprostatectomy with Bricker diversion and lymph node dissection were performed. The postoperative course was uneventful. The pathological examination of the surgical specimen revealed no residual tumor lesion and non-invaded lymph nodes. After 28 months, the patient was in good condition with normal renal function, and normal chest-abdominopelvic CTs at 6, 12, 18 and 24 months.

Discussion

The lymphoepithelial carcinoma of the nasopharynx is strongly associated with infection with the Epstein–Barr virus (EBV). However, no risk factor is known for LELC of the bladder.¹ The primary urothelial LELC was described for the first time by Zukerberg et al., in 1991.² The average age of patients was 65 years with a sex ratio (M:F) of 2:5.¹ The clinical presentation of LELC of the bladder does not differ from that of urothelial carcinomas. It is dominated by macroscopic hematuria and irritative voiding disorders. At endoscopy, the tumor is often unifocal, small, and has a polypoid form.² LELC is characterized in its pure form by an undifferentiated epithelial tumor with a significant lymphocytic infiltration.³ The predominance of lymphoepithelial component is a good prognostic factor. For some authors, conservative treatment can be achieved even in invasive forms because of their chemosensitivity. Conservative treatment was either endoscopic resection or partial cystectomy followed by adjuvant chemotherapy with cisplatin. Progression-free survival was 47 months as reported.³ The number of cases reported and managed by conservative treatment is very low. Most authors recommend radical cystectomy in the case of muscle infiltration.⁴ The prognosis of pure forms is linked to the importance of the inflammatory infiltrate and cytotoxic T lymphocytes for two reasons: early onset of symptoms causing patients to seek care, and strengthening the action of substances used in chemotherapy.⁵ Most authors advocate the quasi-systematic use of cisplatin-based chemotherapy as adjuvant treatment after transurethral resection or cystectomy.⁵

Conclusion

LELC is a rare tumor of the bladder with no therapeutic consensus. Radical treatment seems most appropriate for muscle invasive

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Fig. 1. Echogenic ultrasound image at the left wall of the bladder.

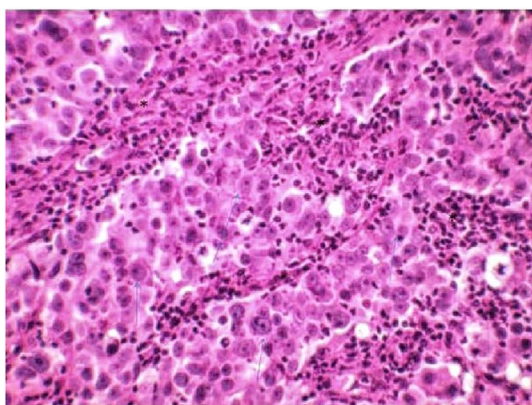


Fig. 2. Syncytial clusters of undifferentiated highly vesicular nucleolus nucleus (arrows) cells bathed in abundant lymphoid stroma (*): hematein and eosin $\times 200$.

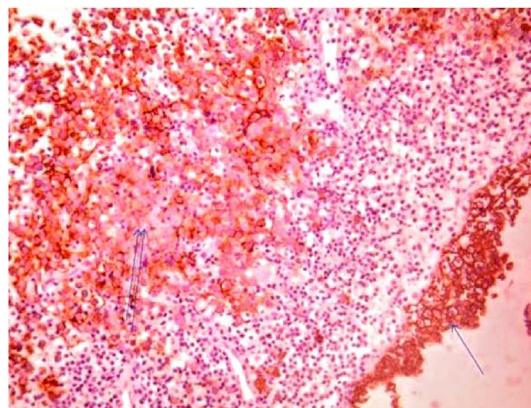


Fig. 3. Anti-cytokeratin antibody: positivity on the coating surface (an arrow), less positivity on the tumor cells (two arrows).

urothelial tumors with LELC component, especially as literature data, advocating conservative treatment regardless of the tumor stage, has a low level of evidence.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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