CASE REPORT - SUPPLEMENTARY MATERIALS

Perivascular epithelioid cell tumor (PEC-ome) of the prostate: Ultrasound feature in case report

Giulia Sbrollini [1, 2], Alessandro Conti [1,2], Andrea Benedetto Galosi [1], Vito Lacetera [2], Rodolfo Montironi [3], Lorenzo Montesi [2], Giovanni Muzzonigro [2]

[1] Department of Urology, "Augusto Murri" General Hospital, ASUR Marche, Fermo, Italy;
[2] Institute of Urology, Ospedali Riuniti, Politechnic University of the Marche, Ancona, Italy;
[3] Institute of Pathology, Ospedali Riuniti, Politechnic University of the Marche, Ancona, Italy.

INTRODUCTION

Perivascular epithelioid neoplasia family comprises tumors characterized by HMB-45-positive cells, with clear/eosinophilic granular cytoplasm, arranged at perivascular level. When they are predominantly or exclusively composed of epithelioid cells these tumors are classified as Perivascular Epithelioid Cells tumors. Presentation sites so far reported are lungs, uterus, kidney, liver, pancreas, rectum, the terminal ileum and falciform ligament. Rare cases of prostatic localization have been reported (4, 5).
Immunoisthochemestry (IHC) in tumor cells is: strongly positive for HMB-45, variably positive for actin and Melan-A, and negative for epithelial markers.
The diagnosis of PEC-ome is based on IHC investigations, in particular in prostatic presentations since there are no pathognomonic morphological characteristics of this neoplasm.
Tumor specific prognosis is poor, especially in cases of locally advanced or metastatic disease (6, 7).
We describe a clinical case of PEC-ome of the prostate, presented with symptoms affecting the lower urinary tract symptoms and acute urinary retention at diagnosis and associated with lung metastasis. We describe clinical and transrectal ultrasound (TRUS) features.

CONCLUSIONS

PEC-omes of the prostate are rare but rapidly invasive. They originate from the anterior fibromuscular stroma and may simulate very closely other diseases causing LUTS. There are no pathognomonic imaging on ultrasound or symptoms suggesting the presence of PEC-ome. A multidisciplinary approach is the best way and treat this aggressive cancer. Histological evaluation is the only diagnostic examination of PEC-ome, although it is often necessary a second opinion.

REFERENCES

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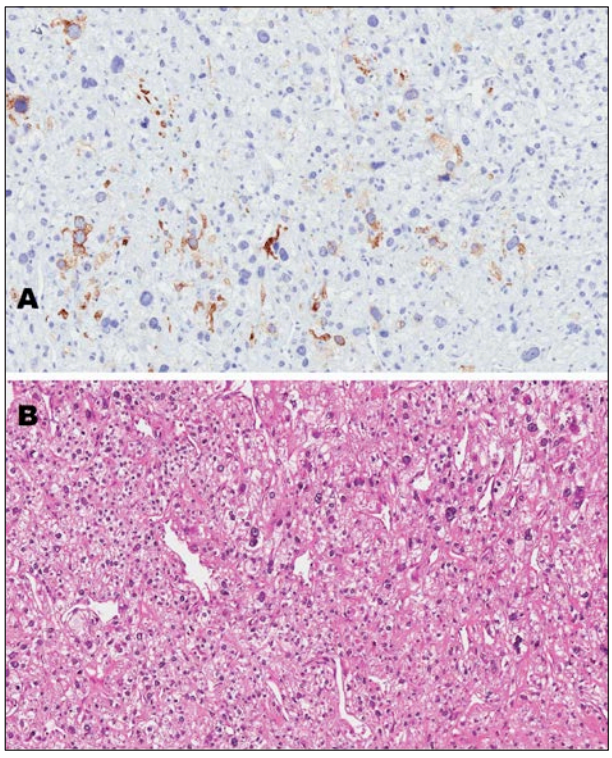
Figure 1.
A: Prostate neoplasm, slide of immunohistochemistry: positivity to TFE3, HMB-45, MelanA, smooth muscle Actine; B: Hematoxylin-Eosin stain, prostate neoplasms.



No conflict of interest declared.

***Figure* 2.**
A: Gray scale *TRUS showing asymmetric anterior* mass *of the prostate (*) on the lett* side;
B: power-<loppler TRUS: large vascular pedicle with central artery, going from the apex of the prostate to *the bladder neck, spraying the tumor* mass itself.