IDENTIKIT OF EOSINOPHILIC VACUOLATED RENAL TUMOR: CASE REPORT OF A NEW PATHOLOGIC EMERGING ENTITY.

GAIA COLALILLO [1,2], FOTIOS DANGLIS [3], NIKOLAOS BRATTIS [1], PANAGIOTIS TZAVELLAS [1], GEORGE PAPATHANASIOU [1], ZOI RETSOU [1], GEORGE KYRIAKOU[1]

1. UROLOGY UNIT, ATHENS MEDICAL CENTER, MAROUSI, ATHENS, GREECE.
2. UROLOGY UNIT, FONDAZIONE PTV POLICLINICO TOR VERGATA, ROME, ITALY.
3. PATHOLOGY UNIT, ATHENS MEDICAL CENTER, MAROUSI, ATHENS, GREECE.

ATHENS MEDICAL GROUP
Athens Medical Center

INTRODUCTION

The Genitourinary Pathology Society (GUPS) consensus proposed a unifying name “eosinophilic vacuolated tumor” (EVT) for a new category of emerging entity of renal cancer, accepted by the World Health Organization (WHO) classification, 2022. In this case report, EVT diagnosed due to a partial nephrectomy performed for a suspicious kidney mass in a 60-year-old patient is presented.

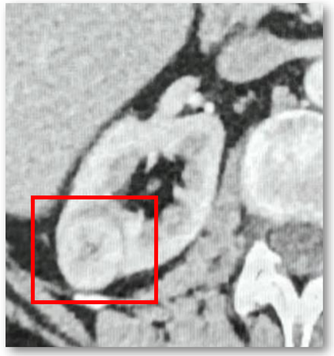
AIM

To provide a clinical and histological description of the EVT.

METHOD

The clinicopathologic features and immunophenotypic profile were studied by light microscopy and immunohistochemistry. Targeted next-generation sequencing (NGS) panel was used to detect cancer-associated mutation.

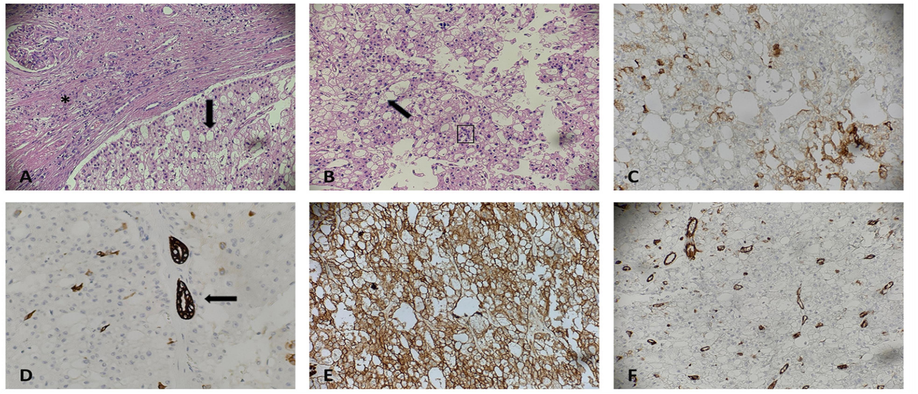






RESULTS

Tumor appears macroscopically circumscribed, mahogany brown. Microscopically, it presents occasionally nested pattern cells with large cytoplasm. There are prominent intracytoplasmic vacuoles in cancer cells. Nuclei of cancer cells are round or oval and contain important eosinophilic nucleoli. In the immunohistochemical evaluation, CD10 is focal positive, CK7 is negative in cancer cells, whereas it is represented around renal tubules entrapped in the tumor. In contrast, CD117 is positive in all cancer cells, unlike vimentin which is expressed only in the connective tissue of the vessels. Based on these findings, the mass has been identified as a renal cancer recently classified as an EVT. We performed a follow-up protocol like a low-risk RCC. No local recurrence has been described and the patient’s glomerular filtration rate was within normal range.



CONCLUSIONS

EVT is a new distinct tumor entity, also recognized by WHO. This variant, like all rare tumors, is not yet fully characterized by morphology, immunohistochemistry and molecular studies. Therefore, additional studies are needed to refine and establish diagnostic criteria

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CONTACT INFORMATION

Gaia_colalillo@hotmail.it
+39 3275442870