Combination of ovarian endometrioid carcinoma and yolk sac tumor in postmenopausal women: a case report

S. Gon Ribeiro¹, H. Helber Alkalay¹, P. Taranto¹, M. Cristófaló Martello², F. Maluf¹

1. Hospital Israelita Albert Einstein 2. Faculdade de Ciências Médicas da Santa Casa de São Paulo

OBJECTIVE

Little is known about Ovarian Yolk Sac Tumors (YSTs) in postmenopausal female. To enhance scientific knowledge about this tumor, we describe a 64 years old woman with YSTs coexisting with ovarian epithelial tumor, focusing on diagnosis and treatment.

METHOD

Literature review and medical record.

CASE REPORT

We describe a 64-year-old postmenopausal female, with an ovarian endometrioid carcinoma (FIGO IA/G3). The patient was started on adjuvant chemotherapy with 6 cycles of carboplatin and paclitaxel. After adjuvant chemotherapy, her scans revealed progressive disease in the liver which biopsy showed poor differentiated epithelioid neoplasia positive for SALL4, indicating a YSTs. We started on chemotherapy with BEP with 3 cycles, with decrease of tumor markers. However, despite initial clinical and laboratorial improvement, patient progressed to death in July.

Table 1: Positive immunohistochemical tests for YSTS

Marker	Antibody	Result
TTF-1	8G7G3/1	POSITIVE (rare cells)
COX-2	CDX-2	POSITIVE (rare cells)
GATA-3	L50-823	POSITIVE
Citoqueratin AE-1/AE-3	AE-1/AE-3	POSITIVE (Strong)
P40 Protein	Polyclonal	POSITIVE
CD10	56C6	POSITIVE (focal)
Glypican3	Polyclonal	POSITIVE
INI-1	MRQ-27	POSITIVE

Other negative markers tested: citoqueratin 7 and 20, PAX-8, Estrogen and progesterone receptor, HER2, Cromatogranin A, Sinaptofisia, Arginase, Mamoglobin, CD31, ERG, Citoceratin 5/6, GFAP, S100, Calponin, GCDFP-15, WT-1, PLAP, AML, Melan-A, Myo-D1, Miogenin, Desmin, Heppar

Figure 1: Multiple liver nodules, progressive disease.

Figure 2: Tumoral marker evolution in diagnosis, after chemotherapy and disease progression. In order, latic dehydrogenase, beta-HCG and alpha fetoprotein.

CONCLUSION

YSTs represent approximately 20% of all malignant germ cell tumors of the ovary and typically occur in young women¹ Germinal cell neoplasm arise from an ovarian epithelial neoplasm is an extremely rare presentation in postmenopausal woman, with aggressive behavior². The recognition of specific subtype is essential to determine treatment decisions and prognosis.

1. McCarthy WA, Masand RP. Ovarian Yolk Sac Tumor With High-Grade Serous Carcinoma in a 62-Year-Old Woman. International Journal of Surgical Pathology 2016;24: 360-365.

2. Taranto P, Carvalho FM, Roithmann S, Maluf FC. Ovarian yolk sac tumor coexisting with epithelial ovarian cancer: an aggressive rare entity. Gynecologic Oncology Reports 2017; 22:37-39.