

# Mucinous carcinoma (non-intestinal type) arising in the ovarian mature cystic teratoma - a case report

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## SUMMARY

Somatic malignant transformation in mature cystic teratoma is a rare phenomenon of a malignancy of differentiated tissue structures of any stem line.

The authors present a case of a 38-year-old female with mature cystic teratoma of both ovaries and with mucinous adenocarcinoma arising from endodermal germ line in the right ovary, showing immunohistochemical features of non-intestinal differentiation. At the time of diagnosis the tumour metastasized to the pelvic and retroperitoneal lymph nodes.

The patient was treated with three lines of chemotherapy and died after 15 months with signs of massive progression into the retroperitoneal, mediastinal and cervical lymph nodes, retroperitoneum, duodenal wall and peritoneal cavity.

Somatic malignant transformation in mature cystic teratoma is associated with poor prognosis. The most important prognostic factor is tumour stage at the time of diagnosis.

**Keywords:** ovary – mature cystic teratoma – malignant transformation – adenocarcinoma – tumour marker

## Mucinózny adenokarcinóm (neintestinálneho typu) vzniknutý v zrelem cystickom teratóme vaječníka - kazuistika

### SÚHRN

Maligna somatická transformácia v zrelem cystickom teratóme je zriedkavý fenomén, pri ktorom vzniká zhubný nádor z diferencovaných tkániových štruktúr niektorého zo zárodočných listov.

Autori prezentujú prípad 38 - ročnej ženy so zrelym cystickým teratómom oboch vaječníkov a mucinóznym adenokarcinómom vzniknutým z endodermálnej zárodočnej línie v pravom ováriu, ktorý imunohistochemicky vykazoval charakteristiky non-intestinálnej differenciácie. V čase diagnostiky nádor metastázoval do panvových a retroperitoneálnych lymfatických uzlín.

Pacientka bola liečená tromia líniami chemoterapie a po 15 mesiacoch od stanovenia diagnózy zomrela za príznakov progresie vo forme masívnej nádorovej propagácie do retroperitoneálnych, mediastinálnych a krčných lymfatických uzlín, infiltrácie retroperitonea a duodena a peritoneálneho rozsevu.

Maligna somatická transformácia v zrelem cystickom teratóme je spojená so zlou prognózou. Najdôležitejším prognostickým faktorom je štadium v čase stanovenia diagnózy.

**Kľúčové slová:** ovárium – zrely cystický teratóm – maligna transformácia – adenokarcinóm – nádorový marker

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Mature cystic teratoma (MCT) of the ovary is the most common tumour arising from germ cells and accounts for more than 20 % of all ovarian tumours (1). Rare complication of MCT is a malignant somatic transformation that occurs in 1 - 3 % of these tumours (1,2). The most common type of malignant tumour arising in the MCT is squamous cell carcinoma (2), which represents 75 - 85 % of all malignant transformations (1,3,4). Adenocarcinomas are much less frequent and occur in approximately 6.8 % of MCT with malignant change (1,3). Other rare malignancies reported in MCT

were basal cell carcinoma, adenosquamous carcinoma, carcinoma of the thyroid, malignant melanoma, sarcoma, carcinosarcoma and neuroectodermal tumour (1,3). Also, there were described sporadic cases of MCT with malignant change of several tissue types in one tumour (5).

We present a case of mucinous carcinoma arising in MCT, which is an interesting example of unusual type of malignant transformation of glandular epithelium and was presented at the time of diagnosis with metastases to the pelvic and interaortocaval lymph nodes.

## CASE REPORT

In a 38-year-old woman, nulligravida and virgo intacta, menses since 12 years of age, with no other remarkable gynaeco-

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