

Uterine tumors resembling ovarian sex cord tumors (UTROSCT). Report of a case with lymph node metastasis

Jirka Mačák¹, Pavel Dundr², Jana Dvořáčková^{1,3}, Jaroslav Klát⁴

¹Department of Pathology, University Hospital and Faculty of Medicine, University of Ostrava, Czech Republic

²Department of Pathology, First Faculty of Medicine and General University Hospital, Charles University in Prague, Czech Republic

³CGB laboratory Inc. Ostrava, Czech Republic

⁴Department of Gynecology and Obstetrics, University Hospital Ostrava, Czech Republic

SUMMARY

Uterine tumors resembling ovarian sex cord tumors (UTROSCT) have an uncertain histogenesis. Although generally considered to be benign, they metastasize in some cases. We report the case of a 53-year-old woman who presented with vaginal bleeding. Clinical examination revealed a tumor sized 1.5 cm in diameter localized in the subendometrial region of the uterine wall. Histologically, the tumor consisted of epithelioid oval cells arranged in solid nests, trabeculae and ribbons. Immunohistochemically, approximately 1% of tumor cells expressed strong desmin positivity, calponin in 10% of cells, WT1 in 80% cells, and Ki-67 was positive in about 5% of tumor cells. All the other immunohistochemical reactions applied including anti-cytokeratin antibodies were negative. The RT-PCR method for identification of the JAZF1-JJAZ1 fusion transcript was negative. In one lymph node in the right iliac artery region, a metastasis of UTROSCT was found. This finding adds to the previously reported UTROSCT cases with metastatic spread.

Keywords: uterine tumors resembling ovarian sex cord tumors – UTROSCT – metastasis – lymph node

Uterine tumors resembling ovarian sex cord tumors (UTROSCT) - popis případu s metastázou do lymfatické uzliny

SOUHRN

Popisujeme vzácný nádor dělohy odpovídající ovariálnímu sex cord nádoru (UTROSCT), který má nejistou histogenezi. Ačkoliv je obecně považovaný za benigní, v některých případech metastazuje. V našem případě šlo o 53letou ženu, která přišla do nemocnice s vaginálním krvácením. Klinické vyšetření ukázalo nádor velikosti v průměru 1,5cm, který byl lokalizovaný subendometriálně ve stěně dělohy. Histologicky byl nádor tvořený epitelioidními oválnými buňkami, které tvořily solidní hnízda, trabekuly a pruhy. V imunohistologickém vyšetření bylo přibližně 1% nádorových buněk výrazně pozitivní s protilátkou proti desminu, kalponinu u 10% buněk, WT1 u 80% buněk a Ki-67 bylo pozitivní asi u 5% nádorových buněk. Ostatní protilátky včetně protilátek proti cytokeratinům byly negativní. Metoda RT-PCR identifikující fúzní transkript JAZF1-JJAZ1 byla negativní. V jedné lymfatické uzlině v oblasti pravé ilické arterie byla zjištěna metastáza UTROSCT. Tento nálezný můžeme přiřadit k některým dříve popsáným UTROSCT, u kterých se objevily metastázy.

Klíčová slova: nádor dělohy odpovídající ovariálnímu sex cord tumoru ovaria – UTROSCT – metastáza – lymfatická uzlina

Cesk Patol 2014; 50(1): 45-49

Uterine tumors resembling ovarian sex cord tumors (UTROSCT) were first reported by Morehead and Bowman in 1945 (1). Later, Clement and Scully (2) classified the tumors into two subgroups. The first was comprised of tumors similar to endometrial stromal tumors with focal epithelioid formations resembling sex cord-like elements of an ovarian tumor making up 10 – 40% of the overall tumor mass. These group I tumors, referred to as endometrial stromal tumors with sex cord-like elements (ESTSCLE), are considered to be endometrial stromal tumors. They are associated with an increased risk of recurrence and metastases. The other group contains more than 50% of

sex cord-like cells (3). Unlike group I, these tumors are clearly separated from the surrounding tissues, have distinct clinicopathologic features and are benign. Yet, cases were published with tumor recurrence or metastases (4-7). In this report, we present another case of UTROSCT with a metastasis in the pelvic lymph node.

MATERIAL AND METHODS

In the last year, one case of UTROSCT was noted at the Department of Pathology, University Hospital in Ostrava. The tissues were fixed in 10% buffered formalin and processed using the paraffin technique. The sections were stained by the standard hematoxylin-eosin technique.

Immunohistochemistry

Immunohistological examination was carried out using the avidin-biotin complex (ABC) method with antibodies against estrogen receptors (ER; NOVOCASTRA, dilution 1:50, clone GF11),

✉ Correspondence address:

Prof. MUDr. Jirka Mačák, CSc.

Department of Pathology, University Hospital Ostrava

17. listopadu 1790, 708 52 Ostrava, Czech Republic

e-mail: macak.jirka@seznam.cz