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Původní práce

Fetální mikrochimérismus u karcinomu endometria

Fetal microchimerism in endometrial cancer

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Publikováno: 30. 12. 2011 Přijato: 13. 12. 2011 Akceptováno: 27. 12. 2011
Actual Gyn 2011, 3, 64 ISSN 1803-9588

Článek lze stáhnout z www.actualgyn.com

Citujte tento článek jako: Hromadnikova I, Kotlabova K, Vernerova Z, Svoboda B, Libalova P. Fetal microchimerism in endometrial cancer. Actual Gyn. 2011;3:64

Objectives: This study examined the presence of fetal microchimerism (FM) in tumor tissues of 40 endometrioid carcinoma, 2 clear cell endometrial carcinoma, 1 serous carcinoma, 3 metaplastic carcinoma and 1 uterine adenosarcoma.

Methods: The occurrence of FM was examined using real-time PCR, SRY and GLO as markers in relation to the subtypes of endometrial carcinoma, the stage of the tumor according to TNM and FIGO classifications and the histological grade of the tumor. The frequency of FM was analysed in relation to patients history of pregnancy, age at the diagnosis and BMI. The frequency of FM was expressed as the number of fetal cells per 10^7 total cells.

Results: FM was demonstrated in 10/40 endometrioid carcinoma, 3/3 uterine carcinosarcoma and 1/2 clear cell endometrial carcinoma. The frequency of FM ranged from 8.8 x 10^{-5} to 15.8 fetal cells per 10^7 total cells (mean 3.02). The grade 2 (3/20 positive cases, mean 6.1) and grade 3 (7/15 positive cases, mean 2.6) showed higher frequencies of FM comparing to grade 1 (4/10 positive cases, mean 5.7). The presence of FM was more frequent in stages pT2 (2/5 positive cases, mean 9.3) and pT3a/pT3b (3/8 positive cases, mean 2.3) comparing to the stage pT1 (8/32 positive cases, mean 1.4), the stage N1 (0/4 positive cases) and the stage M1 (1/2 positive cases, 0.2). According to FIGO system FM was more frequent in stage I (9/34 positive cases, mean 3.0), stage II (1/1 positive case, 2.8) and stages IIIA/IIIB (3/4 positive cases, mean 2.3) comparing to stages IIIC1/IIIC2 (0/4 positive case) and the stage IV (1/2 positive case, 0.2). No relation between FM and patients history of pregnancy (ρ=0.15, p=0.33), age at the diagnosis (ρ=0.16, p=0.27) and BMI (ρ=-0.02, p=0.86) was found.

Conclusions: FM is associated with worse prognosis of endometrial cancer. FM can be rarely detected in original site of carcinogenesis in those carcinomas, which metastasized, since fetal cells apparently traffic to regional lymph nodes and distant metastasis.

Acknowledgements: Supported by VZ MSMT 0021620806 and 262704/SVV/2011.