Endometriosis in a mesothelial cyst of tunica vaginalis of the testis. Report of a case

Michal Zámečník[1], Denisa Hoštáková[2]

[1] Medicyt s. r. o., Laboratory of Surgical Pathology, Trenčín, Slovak Republic
[2] Department of Urology, Faculty Hospital, Trenčín, Slovak Republic

SUMMARY
A rare case of endometriosis occurring in paratesticular mesothelial cyst is presented. It was found in a 7 mm mesothelial inclusion cyst of tunica vaginalis in a 46-years-old old man who underwent a radical orchiectomy for seminoma. It showed a typical histologic pattern with endometrioid cylindrical epithelium and cellular stroma. The lesion was immunohistochemically positive for estrogen receptors and progesterone receptors, in contrast with the adjacent mesothelium. However, rare endometrioid epithelial cells expressed mesothelial markers calretinin and cytokeratin 5/6. This immunohistochemical overlap with mesothelium and morphological transition between endometrioid epithelium and mesothelium favor metaplastic pathogenesis of the lesion. In differential diagnosis, it is important to distinguish paratesticular endometriosis from tissue of teratoma (especially when a germ cell tumor is present in the testis, as was seen in this case).

Keywords: endometriosis – mesothelial cyst – seminoma – testis – tunica vaginalis

Endometrióza v mezotelovej cyste tunica vaginalis testis. Kazuistika

SÚHRN
Prezentovaný je zriedkavý prípad endometriózy v paratestikulárnej mezotelovej cyste. Lézia bola v 7 mm-ovej inklúznej cyste tunica vaginalis u 46-ročného pacienta, u ktorého bola prevedená radikálna orchiektómia z dôvodu seminómu. Ložisko endometriózy malo typickú morfológiu, s endometrioidným kolumnárnym epitelom a celulárnou strómou. Imunohistochemicky bola lézia pozitívna na estrogénové a progesterónové receptory, na rozdiel od blízkeho mezotelu, ktorý bol negatívny. Niekoľko epitelových buniek endometriózy exprimovalo aj mezotelové markery kalretinín a cytokeratín 5/6. Tento nález spolu s morfologickým nálezom prechodu medzi endometrioidným epitelom a mezotelom svedčia pre metaplastickú patogenézu lézie. V diferenciálnej diagnóze paratestikulárnej endometriózy je dôležité odlíšenie od tkaniva teratómu (najmä ak testis obsahuje "germ cell" tumor, ako tomu bolo v prezentovanom prípade).

Kľúčové slová: endometrióza – mezotelová cysta – seminóm – semenník – tunica vaginalis

Cesk Patol 2013; 49(3): 134–136

Endometriosis in male patients is very rare, in contrast with its frequent occurrence in women. In the paratesticular region, only one case with typical morphology has been reported before, to the best of our knowledge (1). An additional recently published case of paratesticular endometriosis (2) represents only so-called stromal endometriosis, i.e. the lesion composed of endometrial stroma and lacking endometrioid-type glands. We would like to present briefly our case of endometriosis occurring in a paratesticular mesothelial cyst.

MATERIAL AND METHODS

The tissue was fixed in 10% formalin and processed routinely. The sections were stained with hematoxylin and eosin, and periodic acid-Schiff stain (PAS) with and without diastase digestion. For immunohistochemistry, the following primary antibodies were used: estrogen receptor (ER) (clone 1D5, 1:40), progesterone receptor (PR) (clone PgR636, 1:100), CK7 (clone OV-TL12/30, 1:200), CK5/6 (clone D5/16B4, 1:50), EMA (clone E29, 1:700), placental alcaline phosphatase (PLAP) (clone 8A9, prediluted), CD119 (polyclonal, 1:150), (all from DAKO, Glostrup, Denmark), CD10 (clone 56C6, 1:50, Novocastra, Newcastle, UK), calretinin (5A5, 1:100, Novocastra, Newcastle, UK), OCT3/4 (polyclonal, 1:3200, Santa Cruz, Vienna, Austria), pancytokeratin (AE1/AE3/PCK26, prediluted, Ventana, Illkirch, France). Immunostaining was performed according to standard protocols using avidin-biotin complex labeled with peroxidase or alkaline phosphatase. Microwave antigen pretreatment was used for immunoreactions with CD10, ER, and PR. Appropriate positive and negative controls were applied.

CASE REPORT

A focus of endometriosis was found in mesothelial inclusion cyst of tunica vaginalis in a 46-years-old old man who underwent a radical right-sided orchiectomy for seminoma. Nine years ago, he had surgery for deviation of the septum nasi. His other medical history was unremarkable. The patient is currently obese, with body mass index 31. He has no gynecomastia or other high estrogen

✉ ***Correspondence address:***
M. Zamecnik, M.D.
Medicyt, s.r.o.
Legionarska 28, 91101 Trencin, Slovak Republic
tel.: +421-907-156629
e-mail: zamecnikm@seznam.cz