Cavernous haemangioma of the oviduct

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Haemangiomas represent benign tumours of vascular origin. Cavernous haemangiomas are formed by cavernally widened irregular vascular spaces, lined with endothelia with no signs of atypia. In the fallopian tube haemangiomas are rare. In the available literature, only six cases were noted. We present a clinical and morphological case of a 69-year-old woman with cavernous haemangioma of the oviduct.

Key words: haemangioma, oviduct.

Introduction

Haemangiomas (haemangiomata) represent benign tumours of vascular origin. Macroscopically they are relatively sharply delineated, they lack any capsule, they are purple in colour, spongy nodules of various size. Under microscope, capillary haemangiomas can be distinguished from cavernous haemangiomas. The first consist of proliferating, sprouting in laminas endothelial cells, which gradually become transformed to canaliculi with a single layer of endothelium. On the other hand, cavernous haemangiomas are formed by cavernally widened irregular vascular spaces, lined with endothelia with no signs of atypia. Under microscope, both capillary and cavernous haemangiomas are filled with erythrocytes. Capillary haemangiomas manifest mainly in the skin, subcutaneous tissue and in mucous membranes. Cavernous haemangiomas used to be noted in the liver, bones and skeletal muscles. In the female genital tract haemangiomas are rare and used to be noted in the vagina [1]. In the available literature, only six cases were noted of haemangioma of the oviduct [1-6].

Clinical history

A 69-year-old woman was admitted to the surgery department in the Lower Silesian Centre of Oncology due to adenocarcinoma of endometrium, diagnosed in the scrapings. The genital organ was removed and the adenocarcinoma was found in the endometrial polyp. In addition, the body of the uterus contained smooth muscle myoma, 130 mm in diameter. Uterine adnexa manifested no pathology except for a simple cyst in the left ovary, 50 mm in diameter, and a cavernous haemangioma in the right oviduct, 3 mm in diameter. Moreover, a non-infiltrating lobular mammary carcinoma was detected in the patient's left breast and metastases in thoracic vertebra 7 and 8, under microscope manifesting traits of metastatic carcinoma of glandular origin. The patient manifested also transient paralysis of both upper and lower extremities.

Histopathological examination: routine staining with haematoxylin and eosin (H + E) (No. 13135-13150/08) of the right oviductal nodule presented a typical pattern of smaller and larger irregular cavernous spaces lined with endothelium, which contained erythrocytes (Fig. 1). The nodule was situated just under oviductal mucosa while the vascular spaces were surrounded by slightly hyalinated connective tissue and smooth muscle cells. Additionally, an immunohistochemical examination was performed on the paraffin sections, evaluating expression of CD31 (+), CD34 (+) – (Fig. 2), EMA (–), vimentin (+), LYVE-1 (–), desmin (–), smooth muscle actin (+).

Discussion

In the analysed literature of the subject, oviductal haemangiomas used to be noted in patients aged from 23 to 77 [1-6]. The nodules showed diameters

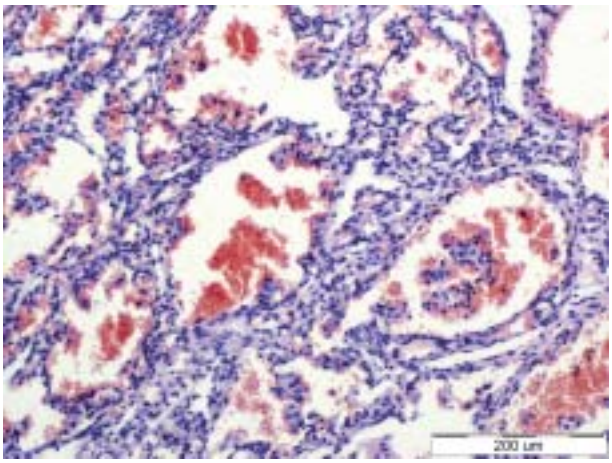

Fig. 1. Cavernous haemangioma of the oviduct. HE, original magnification 100 ×

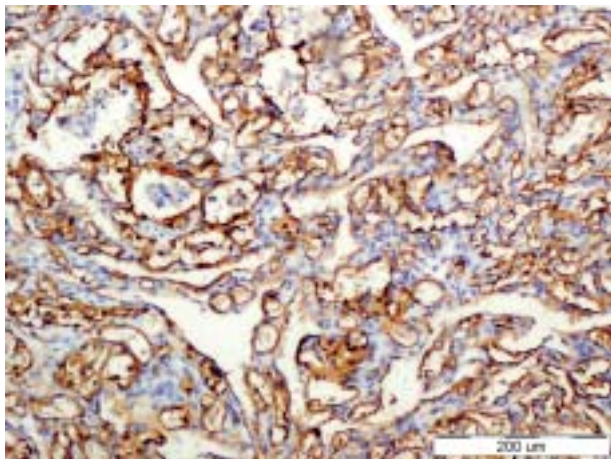

Fig. 2. Cavernous haemangioma of the oviduct. Positive CD34 staining; original magnification 100 ×

ranging from 5 to 20 mm and affected mostly the left oviduct. In two cases, they represented the cause of peritoneal haematoma [3, 4]. The remaining patients were admitted to the surgery department due to adenocarcinoma in uterine body peritoneum [1], irregular menstruation [6] and intestinal torsion [5]. One of the tumours represented an incidental nodule, detected during the autopsy of the patient who died due to meningitis [2]. Occasionally, congenital multifocal vascular deformations were noted [1, 3].

The lesion described by us represented an accidental finding and due to its size and localization it produced no specific signs or symptoms. Histological structure of the tumour, even if as a rule unequivocal, requires differentiation from lymphangioma, smooth muscle cell vascular myoma, mesothelioma, histiocytoid angioma or adenomatoid tumour. In the differential diagnosis immunocytochemical studies are recommended. In the case of haemangioma, the tumour manifests positive reactions for CD31, CD34; vimentin and SMA. The tumour manifests no positive reactions for LYVE-1 (which distinguishes it from lymphangioma) EMA (which excludes glandular origin of the tumour) and Ki-67 (which excludes malignant transformation of the tumour). In the described case, the expression of CD31, CD34, vimentin and SMA has been documented, which in the absence of LYVE-1 and Ki67 expression, unequivocally has confirmed the type of the detected oviduct tumour.

References

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