CASE REPORT
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Hemangioma of the uterus

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ABSTRACT

This paper presents a case of a patient with hemangioma of the uterus, which is one of the very rare localizations for this type of tumors. Hemangiomas are tumors that originate from blood vessels and are more often found on the skin or in the liver. No one has ever thought of its localization in the uterus until histolpathological finding proves it. We presented a case of a 57 years old patient who was operated at the clinic for surgical oncology - department of gynecology of the Institute of Oncology Sremska Kamenica.

KEY WORDS: *Hemangioma; Uterine Neoplasms*

INTRODUCTION

Hemangiomas are benign tumors that originate from blood vessels. They appear in two forms, as capillary hemangioma and cavernous hemangioma. They originate from the endothelial cells of blood vessels, which represent multipotent cellular elements, or from pericytes located on the outer side of the blood vessel wall.

Tumors originating from blood vessels can have different biological behavior and their occurrences in malignant forms are very rare.

Capillary hemangiomas are usually found on the skin. They can have different size and shape, from very small to very large ones, whose occurrence may cause esthetic disturbance. Histological picture of capillary hemangioma is characterized by the large number of anastomotic vascular spaces, which can have irregular arrangement and size. This form of hemangioma is covered with flattened endothelial cells whose lumen is filled with blood and sometimes thrombi. Exceptionally, it can be limited by fibrous capsule.

Cavernous hemangioma can be found in the skin as well as in the parenchimatous organs: liver, kidney, breast, muscles, intestine wall, brain, and bones. Histological picture is characterized by vascular spaces limited by endothelial cells, which are much wider then those of capillary hemangiomas and they take a shape of a cavern. They have spongy structure and certain vascular spaces are divided by connective septa. In case of thrombosis, the organization of hemangiomas can occur.

Many tumors originating from blood vessels are congenital anomalies and multiple hemangiomas are not rare in such cases.

Both types of haemangiomas can be found in the uterus but very rarely. Until 1988, 88 such cases had been described in professional literature. Hemangiomas of the uterus and those of other localizations can be congenital or acquired. Congenital form can occur within hereditary hemorrhagic telangiectasis, while acquired form can have secondary occurrence due to surgical interventions on the uterus or trophoblastic disease.

Clinical hemangioma of the uterus are impressive myoma and for that reason they are the indication for operative treatment. They are usually asymptomatic. However, extensive bleeding can occur after curettage. Definite diagnosis of hemangioma of the uterus is made after the operation by histopathological finding.

Ultrasonographic finding points out the enlarged uterus with the occurrence of cavernous change of mixed echostructure. Doppler technique, NMR and CT are also used as an addition to US diagnostics. Arteriography can be significant in making the diagnosis of cases that have not been explained yet. It can also be used as a therapeutic procedure in cases of hemangioma embolization with refractory hemorrhage.

CASE REPORT

The patient MM, 54 years old, was operated at the department of the Clinic of Surgical Oncology, Sremska Kamenica. The reason she came to visit a gynecologist was a minor postmenopausal bleeding and occasional pains in the lower part of the stomach, felt as pressure.Patient's anamnesis showed that she has been suffering from high blood pressure for the last five years, angina pectoris, and cerebrovascular accident with left hemiparesis, consequently. Eighteen years ago, she had a myomectomy within marital sterility treatment. Heart catheterization was done as a pre-operative preparation.

Gynecological anamnesis: delivery 0, abortion 0, menarche 14 years, last menstruation at the age of 54, menstrual cycles were regular.Gynecological examination established the normal finding of the outer genitals. Palpatory finding: uterus in *anteversio flexio* with the dimensions of approximately 10 x 15 cm, dextroproned, movable, smooth, softer consistency. Both ovaries had a regular palpatory finding.

Ultrasonographic examination showed uterus in indifferent position, the dimensions of 102 x 55 x 84 mm, with several subserous myomatous knobs in fundus. The uterus cavity was broadened toward the isthmicocervical part and filled with hyperechogenic formation of 66 x 42 mm, which invaded the back wall of the uterus. Both ovaries were difficult to examine. The control ultrasonographic finding showed the same picture with the enlargement of the previously described change of the uterus back wall (76 x 68 mm).

Fractional explorative curettage was not done because the change was too large and there was a possibility of hemorrhage.

Total hysterectomy with bilateral adnexectomy was done. Intraoperative finding: the uterus totally enlarged, movable, smooth and with shiny surface. In fundus and lateral on the right side, there were tissue growths with epiploic sigma. The uterus of 15 x 15 cm presented with a tumor (approximately 7 x 7cm) at the back wall., round and dark red, partly livid color. Both ovaries and Fallopian tubes had a normal macroscopic finding. The bladder was grown together high to the front wall of the uterus. The other abdominal organs had normal macroscopic findings.

Macroscopic description of the operative preparations: the uterus with adnexa of 291.80g. Cervix shortened with the length of 1cm, the portion changed by scars with the diameter of 3 x 2cm. Cervical channel passable, contained blood and mucus. There were knobs supracervically toward the back part; the biggest had diameters of 8.5 x 7 cm, livid color, and softer consistency. The endometrium was smooth and pink. Adnexa were not macroscopically changed; the left ovary was solid, had 2.1g, and diameters of 1.5 x 1cm. The left tube was macroscopically normal. The right ovary had 3.2 g and diameters of 2.2 x 3cm with a smaller cyst. The right tube (4 cm) was macroscopically normal.

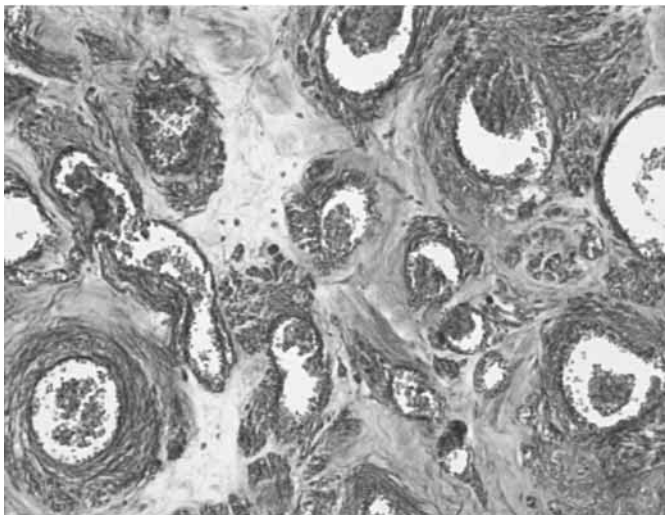

Figure 1. Macroscopic review of a hemangioma of the uterus

Histopathological analysis

Tissue samples were fixed by neutral formalin and put into a paraffin mold, which we later used to make HE preparations to have the insight into the basic morphology of the delivered material; histological incisions were made for histochemical coloring. We applied PAS and MALLORY methods to present the morphological details: numerous vascular spaces of capillary type of which some had swollen medial wall layers while the others had full lumens. All these made the uterus body look spongy. The noted blood vessels were dipped into mostly poor hypocellular connective tissue where focal edema was also noticed.

Final histopathological finding was: *Haemangioma uteri arteriovenosum partim oedematosum. Leiomyoma uteri partim hyalinisatum. Hyperplasio endometrii cystica. Endometriosis corticis ovarii. Cystis simplex ovarii. Cervicitis chr. Metaplasio epithelii planocellularis. Tubae uterinae sine alteratione pathohystologicae.*

CONCLUSION

Hemangioma of the uterus is a rare localization for this type of tumor. Proper diagnosis can be made only after histopathological finding. In our case, definite diagnosis of hemangioma of the uterus was established by means of surgery, ultrasound examination, and histopathological finding.

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