

## Cavernous cervical hemangioma: An incidental finding

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### ABSTRACT

Cavernous hemangiomas of the uterine cervix are very rare benign tumors. They are usually more common around the third decade, but around the fifth decade, their frequency is even rarer. Sometimes, they can cause obstetric and gynecological complications, but most are asymptomatic and are detected by chance. Surgical treatment is usually the means of choice, which, in most cases, is performed in connection with other pathologies. We present a case of cervical hemangioma in a 58-year-old woman who was diagnosed accidentally. The reason for consulting a gynecologist was the weak postmenopausal bleeding for 6 months. Ultrasonographically, intramural leiomyoma of the uterine corpus was detected. Atrophic endometrium was found from the test abrasion. A total hysterectomy with salpingo-oophorectomy was performed. The histological examination confirmed the diagnosis: Cavernous hemangioma of the cervix. This case supports the fact that postmenopausal bleeding may also be due to cavernous hemangioma of the cervix.

**Key words:** Cavernous hemangioma, Cervix, Leiomyoma, Uterus

Cavernous hemangioma of the uterine cervix is a rare benign pathology [1]. Only about 60 cases are reported in the literature. The average age of most reported cases is about 35 years. Cavernous hemangioma is usually most common in the liver [2]. A cavernous hemangioma may manifest with vaginal bleeding or pains [1]. The gynecological complications are intermenstrual spotting, abnormal uterine bleeding, postmenopausal bleeding, post-coitus bleeding, infertility, and dyspareunia [1]. The anatomopathological study proves the benign and vascular nature of the tumor. The treatment is generally surgical [1]. The obstetrical complications are the premature rupture of membranes, the postpartum hemorrhage, and disseminated intravascular coagulation [3]. The dilemma that may arise is the delivery way in a pregnant mother having a cervical cavernous hemangioma [3].

Our case is cavernous hemangioma in a postmenopausal woman with uterine corpus leiomyoma and vaginal postmenopausal bleeding. This case is presented to increase the awareness of the existence of cavernous hemangioma of the uterine cervix in older women.


### CASE REPORT

A 58-year-old female presented with pain in the abdomen and weak postmenopausal bleeding for 6 months. On general examination, the vitals were stable. The gynecological examination revealed the cervix with hyperemic portion and no changes in the uterine corpus.

Ultrasound transvaginal test showed the uterine body with intramural leiomyoma measuring 3 cm in diameter. Paraclinical tests revealed hemoglobin 118 gm/L, platelet  $133 \times 10^9/L$ , activated partial thromboplastin time 41.1 s/32 s, prothrombin time 17.3 s/12 s, and international normalized ratio 1.9. The serum level of lactate dehydrogenase was 153 IU/ml (normal range: 106–220 IU/l), carbohydrate antigen-125 (CA-125) was 26.1 U/ml (normal range: 0–35 U/ml), and carcinoembryonic antigen was 2.1 ng/ml (normal range: 0–5 ng/ml). Histological results from the sample abrasion showed tubular and single cystic endometrial glands, stroma appears inactive with variable collagenization and minimal mitotic activity – mild atrophy.

A total hysterectomy and salpingo-oophorectomy were performed. No post-surgical complications were reported. Macroscopically examination of the specimen showed uterus with cervix measuring 7 cm × 5 cm × 3.5 cm. Cervix had a slightly hyperemic portion and visible livid small areas (Fig. 1a). The cervix cut section showed microscopic brownish slightly dilated spaces (Fig. 1b). The corpus uteri had intramural leiomyoma in the uterine fundus measuring 3 cm in diameter. The uterine tubes and ovaries were with light atrophic.

Histological examination showed multiple thin-walled vascular channels of varying size in cervical stroma having erythrocytes within the lumen of the cervix, suggestive of cavernous type. These features were consistent with vascular hemangioma – cavernous type (Fig. 2a-c). Uterine corpus section studied from myometrium showed features of adenomyosis

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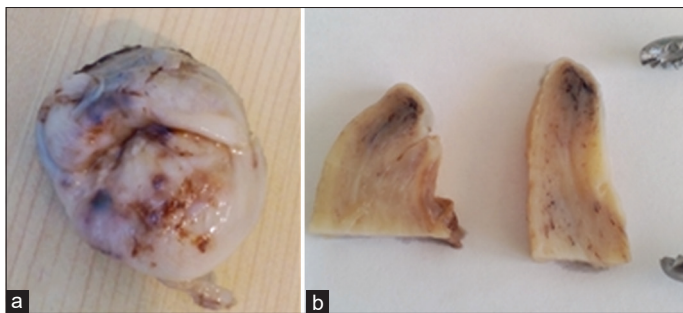
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and typical leiomyoma. The fallopian tubes have fibrosis. The ovaries were with white bodies. The presence of cavernous vascular spaces filled with erythrocytes and upholstered with endothelial cells. It gave us a reason to diagnose cavernous hemangiomas of the cervix. During the consultations in the 1<sup>st</sup>, 3<sup>rd</sup>, and 6<sup>th</sup> months, the patient was in good condition and without complaints.

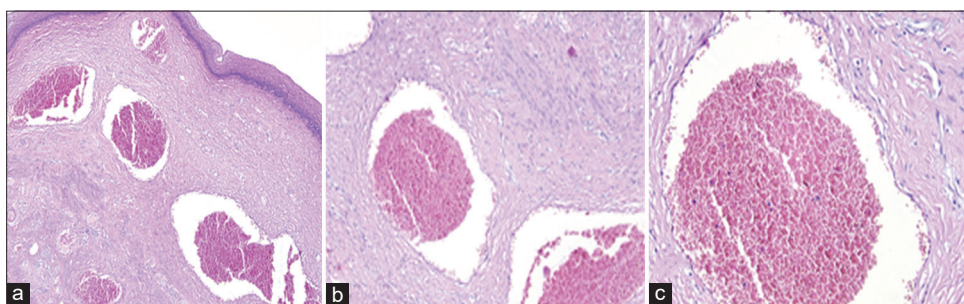
## DISCUSSION

Hemangiomas are a very common benign vascular lesion. It commonly occurs in the skin, subcutaneous tissue, oral cavity, liver, and kidneys. However, hemangioma of the cervix is very rare and about 60 cases are reported in the literature to date [1]. It was first reported in 1948. The vast majority of cervical hemangiomas reported are in reproductive age women [1]. The tumor is said to be more common in the second and third decades of life and manifests as postcoital bleeding or intermittent vaginal bleeding. In these cases, cervical cancer should be ruled out cytologically and/or biopsy [4].

In the present case of cervical hemangioma, the age of the patient was 58 years. This is one of the few reported cases of cavernous hemangioma in a menopausal woman with mild vaginal bleeding. In the reported case, due to postmenopausal vaginal bleeding, tumor markers that were within normal limits were prescribed. Test abrasion does not confirm carcinoma. The presence of leiomyoma from transvaginal ultrasound and bleeding is a reason for performing a total hysterectomy.



**Figure 1: Macrophotography: (a) Portion with slight hyperemia and small grayish-brown areas; (b) the excised area of the cervix showing brownish slightly dilated spaces in the portion area**



**Figure 2: Histology (H and E) Microphotography: (a) A multilayered cervical squamous epithelium and a cervical stroma in which cavernous-type vascular canals are visible – cavernous hemangioma (enlargement  $\times 50$ ); (b) cervical stroma in which cavernous-type vascular canals are visible (enlargement  $\times 100$ ); (c) cervical stroma in which a cavernous-type vascular canal is seen with good visible endothelial cells and erythrocytes in its lumen (enlargement  $\times 200$ )**

The morphological examination of the sent surgical material establishes the final diagnosis. Therefore, this condition should be considered in the differential diagnosis of menopausal women with postmenopausal bleeding [5].

Due to their small size, most of the cavernous hemangiomas are asymptomatic and discovered incidentally. Only one-third of the cases are symptomatic [1]. Patients may present with vaginal bleeding, postcoital bleeding, infertility, dyspareunia, and also associated with the use of oral contraceptives [6] or also mimic endometriosis [7]. The obstetrical complications are the premature rupture of membranes, postpartum hemorrhage, and disseminated intravascular coagulation.

Rare cases of the coexistence of cervical hemangioma with pregnancy are also reported. Association with oral contraceptive pills and pregnancy indicates the role of the hormone in the development of cervical hemangiomas [3]. Due to variations in hormonal levels in pregnancy, it may aggravate the symptoms of hemangiomas. The estrogen has an important role in the development of hemangioma, by the presence of estrogen receptors in endothelial cells of hemangioma [1]. All the cases of cervix hemangiomas described in the literature to date have shown progressive symptoms of uterine bleeding which do not respond to conservative therapy [3].

Most of these lesions are asymptomatic, but sometimes they may cause abnormal vaginal bleeding and hence should be included in the differential diagnosis of patients with vaginal bleeding. In the present case, the cervical hemangioma showed areas of portion hemorrhage and small livid areas, as well as brownish slightly dilated areas at the incision. The cervical cavernous hemangioma can be associated with generalized vascular malformations such as Blue rubber bleb nevus syndrome, which is a rare disease, which, in our case, has a slight macroscopic resemblance, but the histology is definitely in favor of cavernous hemangioma.

Surgical treatment is the tool of choice in most cases, but conservative treatment may also be considered, such as cryotherapy, sclerosing agents, and laser in preserving fertility in young females. In the present case, a total hysterectomy was performed for leiomyoma and vaginal bleeding, and hemangioma of the cervix was diagnosed morphologically accidentally.

## CONCLUSION

The uterine cervix cavernous hemangioma is a very rare pathology in old women. Sometimes, it can cause obstetric and gynecological complications, but often it is asymptomatic or with vaginal bleeding. The differential diagnosis is very difficult due to the rare localization of hemangiomas in the cervix. The final diagnosis can only be made through the histological study.

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