**CASE REPORT**

**Adenosarcoma of the uterine cervix: positive and differential diagnosis**

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**Abstract**

Adenosarcoma is considered as being a variety of mixed Müllerian tumor having a small grade of malignity. Present case refers to a perimenopause patient examined for a structure of bleeding endocervical polypoid. Diagnostic evaluation performed after biopsy revealed a cervical leiomyosarcoma followed by operation. The range of occurrence is interesting, having in mind positive and differential diagnosis problems that occurred.

**Keywords**: leiomyosarcoma, uterine cervix.

**Introduction**

Müller’s adenosarcoma, a mixed mesodermal tumor variant, is characterized by a glandular proliferation without atypics in a malign sarcomatous stroma [1]. Adenosarcomas are considered as tumors with reduced degree malignity despite the Müllerian malign mixed tumors where both the epithelial and the mesenchymal components are malign ones. Within adenosarcomas, the evolution of the two components is an antagonic one, namely the former presents real benignity features while the latter is malign [2]. Müllerian mixed tumors of the uterine cervix compared to those of the uterine body are extremely rare [3].

The literature emphasizes that the primitive cervical adenosarcomas use to appear with a frequency of two to 24 endometrial primitive similar tumors. This rare tumor represents only 8% of all the uterine sarcomas, usually originating from the level of the uterine body, and it presents as a protrusive polypoid mass into the cervical channel [4, 5].

The uterine Müllerian adenosarcoma is a biphasic rare tumor and usually it use to present as a polypoid mass [6]. Generally, clinical manifestations are non-specific ones, usually common to those of other neoplasias having that localization. They are diagnosed in menopaused patients, the main symptom being represented by vaginal bleeding. It is describe a case of adenosarcoma of the uterine corpus associated with ovarian thecoma, estrogen stimulation may play a role in the development of mesenchymal and mixed epithelial/mesenchymal uterine tumors, including adenosarcoma [7].

As the cervical adenosarcoma has an extremely rare incidence, we consider as very useful to present the case studied by us taking into account the problems of both positive and differential diagnosis raised by the presence of such a tumor.

**Material and methods**

A fragment from an endocervical bleeding polypoid formation removed from a patient, 49 years old, was available for our study.

Histopathological exam which was performed upon the biptic piece allowed us to assess the diagnosis of cervical leiomyosarcoma. After the histopathological diagnosis, a surgical intervention was made subsequently.

Macroscopic exam of the surgically resected piece revealed a polypoid formation, with a large implantation base of 4 cm diameter, at the level of the cervical channel.

A white-grey aspect with necrosis areas and hemorrhage could be seen on the tumoral formation section surface.

Seriate sections were performed from both the cervix and uterine body levels then they were processed by histopathological usual techniques and histochemical stained (silver Gömöri impregnation).

**Results**

The histopathological study performed upon seriate sections at different levels of the tumoral mass revealed a neoplastic proliferation with a pseudopolypous made up of a sarcomatous component with features of malignity, and an epithelial component with features of...
benignity. The former presented the aspect of a monomorphous proliferation of elongate, fusiform reduced size cells, with rounded or oval, hyperchromatic nuclei (Figure 1).

The quantitative reduced cytoplasm with indefinite limits has been observed. Sarcomatous cells circumferentially distributed especially periglandularly and perivascularly, thus achieving real muffs (Figure 2).

Mitosis were rare, about 1–2 on microscopic field with objective ×10. The latter presented features of benignity.

Epithelial, uni- or pseudo-stratified cells line the sarcomatous component externally, therefore achieving towards inside numerous fold-shape glandular invaginations with pseudo-papillary aspect, polypous and intraglandular micropolypous aspects (Figure 3).

In some tumoral areas, we could see stromal inflammatory infiltrates of lympho-plasmocitary type but also neutrophile polymorphonuclear distributed among the sarcomatous cells both peri- and intraglandulary. We also remarked hemorrhagic infiltrates with focal character and free or phagocyted hemosiderinic pigment (Figure 4).

### Discussions

Tumor biphasic epithelial and mesenchymatous aspects with clear features of benignity for the epithelial component and malignity for the sarcomatous one, allowed the diagnosis of adenosarcoma. The presence of such a tumor at the cervical level raised the problem of differential diagnosis with an endometrial primitive similar tumor, which infiltrated the uterine cervix, or to a cervical benign tumor such as the papillary adenofibroma [8].

Seriate sections performed at the different levels of the uterine body excluded the endometrial primitive tumor [9].

In addition, the presence of the dense stromal proliferation, of the atypical cells and atypical mitosis excluded a benign tumor thus directing the diagnosis towards an adenosarcoma [10].

Data from literature show that aspect as being the most frequent; only in about 25% of cases, the adenosarcomas presented associated aspects of heterologous sarcoma of rhabdomyosarcoma, condrosarcoma, leiomyosarcoma, etc., types [11].

The evolution of the cervical adenosarcomas is considered as favorable as compared to other variety of mesodermal mixed tumors [12].

Clement PB et al. (1990) reported only the presence of the relapses after five years since the diagnosis, in a great number of patients; metastasis at a distance was not noted during the period [13, 14].

Another study concerning the rate of mortality in patients with adenosarcoma, pointed out that the demise had occurred in 10–25% of the patients with such a diagnosis [15].

Immunohistochemical studies performed upon the malign Müllerian mixed and sarcomatous tumors are useful for a differential diagnosis taking into account CD10 positivity in tumors derived from neoplastic mesenchymal cells [16].

### Conclusions

The case presented by us revealed various clinical-histopathological aspects and the problems of differential diagnosis that appeared in a case of uterine cervix adenosarcoma.

The presence of the two components, epithelial and mesenchymal, raised the problem of a mixed tumor; benign aspect of the epithelial component besides the sarcomatous mesenchymal proliferation allowed the diagnosis of adenosarcoma.

We consider that the diagnosis of the uterine cervix adenosarcoma remains an excluding one and it may be formulated only after a similar endometrial tumor has been excluded.

### References


Figure 1 – Adenosarcoma of the uterine cervix – part of mesenchyma of tumor (HE stain, ob. ×10)

Figure 2 – Adenosarcoma of the uterine cervix – part of mesenchyma of tumor (Gömöri stain, ob. ×10)

Figure 3 – Adenosarcoma of the uterine cervix – part of tumor epithelia: intraglandular micropolypous aspects (Gömöri stain, ob. ×10)

Figure 4 – Adenosarcoma of the uterine cervix – part of tumor epithelia: inflammatory infiltrates of lympho-plasmocitary and fagocited hemosiderinic pigment (HE stain, ob. ×10)
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