# Uterine sarcoma diagnosed during colon surgery a complete precise diagnosis

## M. Gojnic<sup>1</sup>, V. Dugalic<sup>2</sup>, M. Brankovic<sup>3</sup>, M. Pervulov<sup>1</sup>, M. Cvetkovic<sup>1</sup>, M. Antic<sup>1</sup>

<sup>1</sup>Institute of Gynecology and Obstetrics, Clinical Center of Serbia, University of Belgrade <sup>2</sup>Institute for Surgery, Clinical Center of Serbia, University of Belgrade; <sup>3</sup>Clinical Center "Bezanijska Kosa", Belgrade University Hospital "Narodni Front", Belgrade (Serbia)

#### Summary

Uterine sarcomas are very rare tumors with the greatest malignant potential of all uterine tumors, and they differ significantly from endometrial carcinoma by their specific course, propagation and prognosis. A 54-year-old patient, after three vaginal deliveries and negative personal and family history, as well as regular cycles, presented with secondary problems related to occasional constipation with sporadic diarrhea and bloody stools. Colonoscopy revealed a colon tumor.

Key words: Uterus; Uterine sarcoma; Colon tumor.

#### **Case Report**

Uterine sarcomas are very rare cases of tumors with the greatest malignant potential of all uterine tumors, and they differ significantly from endometrial carcinomas by their specific course, propagation and prognosis. Uterine sarcomas make up 3-5% of all tumors of the uterus [1]. Homologous uterine sarcomas originate from endometrial glands or endometrial stroma (endometrial stromal sarcoma) or the muscular layer of the uterus (leiomyosarcoma). Other types of homologous sarcomas (angiosarcoma or lymphosarcoma) originate from other tissues that are normally found in the uterus – blood and lymph vessels. Table 1 shows the classification of uterine sarcomas. The incidence of uterine sarcoma in combination with pregnancy is rare in older primigravidas, and the course of pregnancy becomes questionable in medical and ethical terms.

A 54-year-old patient, after three vaginal deliveries and negative personal and family history, as well as regular cycles, presented with secondary problems related to occasional constipation with sporadic diarrhea and bloody stools. After performing colonoscopy, a colon tumor was found. The patient had had no gynecological examination for two years.

During the surgical procedure, it was established that colon changes were not of primary intestinal etiology but a consequence of prominence and destruction of the colon wall by a long-term or aggressive pathologically changed uterus. Hysterectomy with salpingo-oophorectomy was performed (Figures 1, 2).

Histopathological analysis confirmed primary uterine pathology, uterine sarcoma, which was an atypical alteration in the colon wall without inflammation and ascites.

Additional information received from the patient revealed suspected prolonged bleeding and routine uterine revision after each delivery. Histopathological analysis of the placenta was not performed after the deliveries.

After her last delivery, 20 years before, the patient had three abortions performed in appropriate institutions, but with severe secondary inflammatory processes of the endometrium and parametrium bilaterally. Atypical small pelvis and abdominal changes before the described procedure lasted for more than a year without sudden changes and with gradual symptom progression, in terms of occasional pain, abdominal swelling and passage problems.

The patient had stopped menstruating two years earlier without distinctive menopausal discomfort. Previously, she had had no changes in menstruation frequency, duration or quantity. The basic reason the patient contacted a surgeon was blood in her stool.

In addition to the hysterectomy with bilateral salpingooophorectomy, omentectomy, anus extraction, abdominal cavity revision, drainage and lavage were performed. During the second procedure 40 days later, an ileostoma was inserted and the anus returned to normal function.

### Conclusion

Gynecology is a common ground for surgeons. However, an artificial barrier between human organ systems seems to have been created forgetting the "entity

Table 1. — Classification according to Ober [14].

Homologous	Heterologous
Pure	
Endometrial stromal sarcoma	
(endolymphatic stromal myosis)	Rhabomyosarcoma
Leiomyosarcoma	Chondrosarcoma
Angiosarcoma	Osteosarcoma
Fibrosarcoma	Liposarcoma
Mixed	
Carcinosarcoma	Mixed mesodermal (Mullerian)
	tumor
Classification according to GOG*	[9]
Leiomyosarcoma	
Endometrial stroma sarcoma	
Mixed Mullerian tumor	
(carcinosarcoma)	
Mixed heterologous Mullerian tur	ıor
(mixed mesodermal sarcoma)	
Other uterine sarcomas	

\*Gynecologic Oncology Group.

Revised manuscript accepted for publication March 27, 2008

(fistula).

Figure 1. — Alteration of colon secondary to uterine sarcoma.

as a whole". Was our patient's hemorrhage a consequence of revisions? In the future, should we perform not only hematological examination and antibody and infection analyses, but also explorative curettage in conditions of suspected ultrasonography changes? Should diagnosis of the colon and small pelvis and vice versa be carried out in postmenopausal women?

#### References

- Emerich J., Konefka T., Dudziak M.: "Malignant non-epithelial neoplasms of the uterine body-clinical analysis". *Ginekol. Pol.*, 1997, 68, 610.
- [2] Ferguson S.E., Tomos C., Hummer A., Barakat R.R., Soslov R.A.: "Prognostic features of surgical Stage I uterine carcinosarcoma". *Am. J. Surg. Pathol.*, 2007, *31*, 1653.
- [3] Arrastia C.D., Fruchter R.G., Clark M., Maiman M., Remy J.C., Macasaet M., Gates E.J., Di Maio T., Marzec T.: "Uterine carcinosarcomas: incidence and trends in management and survival". *Gynecol. Oncol.*, 1997, 65, 158.
- [4] Cenacchi G., Pasquinelli G., Montanaro L., Cerasoli S., Vici M., Bisceglia M. *et al.*: "Primary ndocervical extraosseous Ewing's sarcoma/PNET". *Int. J. Gynecol. Pathol.*, 1998, 17, 83.
- [5] Feroze M., Aravindan K.P., Thomas M.: "Mullerian adenosarcoma of the uterine cervix". *Indian J. Cancer*, 1997, 34, 68.
- [6] Forney J.P., Buschbaum H.J.: "Classifying, staging and treating uterine sarcomas". Contemp. Obstet. Gynecol., 1981, 18, 47.
- [7] Fotiou S., Hatjieleeftheriou G., Kyrousis G., Kokka F., Apostolikas N.: "Long-term tamoxifen treatment: a possible aetiological factor in the development of uterine carcinosarcoma". *Anticancer Res.*, 2000, 20, 2015.

- [8] Harlow B.L., Weiss N.S., Lofton S.: "The epidemiology of sarcomas of the uterus". J. Natl. Cancer Inst., 1986, 76, 399.
- [9] Hays D.M., Shimada H., Raney R.B. Jr., Tefft M., Newton W., Crist W.H. *et al.*: "Clinical staging and treatment results in rhabdomyosarcoma of the female genital tract among children and adolescents". *Cancer*, 1988, *61*, 1893.
- [10] Huang K.T., Chen C.A., Tseng G.C., Chen T.M., Cheng W.F., Hsieh C.Y.: "Endometrial stromal sarcoma of twenty cases". Acta Obstet. Gynecol. Scand., 1996, 75, 551.
- [11] Janjić M.: "Patologija ženskog genitalnog sistema". Dr Miomir A. Janjić, Beograd 1992.
- [12] Jones M.W., Norris H.J.: "Clinicopathologic study of 28 uterine leiomyosarcomas with metastasis". *Int. J. Gynecol. Pathol.*, 1995, 14, 243.
- [13] South S.A., Hutton M., Farrell C., Mhawech-Fauceglia P., Rodabaugh K.J.: "Uterine carcinosarcoma associated with hereditary nonpolyposis colorectal cancer". *Obstet. Gynecol.*, 2007, *110* (2 Pt 2), 543.
- [14] Moinfar F., Azodi M., Tavassoli F.A.: "Uterine sarcomas". Pathology, 2007, 39, 55.

Address reprint requests to: M. GOJNIC, M.D., Ph.D. Medical Faculty of Belgrade Institute of Gynecology and Obstetrics 38 Milesevska Street 11000 Belgrade (Serbia) e-mail: miroslavagojnicdugalic@yahoo.com

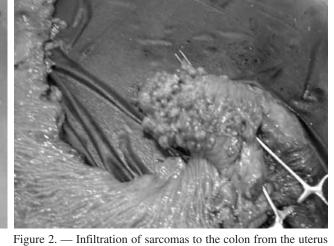




Fig. 1

Fig. 2