# Rare metastases of carcinoma of uterine cervix

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#### **Summary**

This paper describes a case of cancer of the uterine cervix metastasizing in the spleen two years after the primary carcinoma was diagnosed and treated. After detailed diagnostics, the patient was subjected to surgery. Histopathological examination after splenectomy confirmed a very rare case - presence of metastases of planocellular carcinoma of the uterine cervix. Over the last ten years, references cite isolated cases of metastases of adenocarcinoma of the colon, stomach and breast in the spleen as well as lung carcinoma and malignant skin melanoma. Until now cases of uterine cervix carcinoma metastasizing to the spleen have been published as micrometastases detected in autopsy material.

Key words: Metastases in the spleen; Uterine cervix carcinoma.

#### Introduction

Secondary deposits in the spleen are extremely rare. Over the last ten years, references have described only isolated cases of adenocarcinoma of the colon, stomach and breast metastases to the spleen [1-4]. Such metastases of lung carcinoma and malignant skin melanoma in the spleen are somewhat more frequent, while planocellular carcinoma metastases are extremely rare [5-7]. A case of planocellular carcinoma of the lower third of the esophagus metastasizing to the spleen and the tail of the pancreas has been reported [8]. As far as metastases of carcinoma of the uterine cervix to the spleen are concerned, published studies performed on autopsy material show that cervical carcinoma rarely metastasizes to the spleen - micrometastases of this carcinoma in the spleen have been found in 1.6% cases of untreated patients and 1.2% cases of patients diagnosed with cervical carcinoma [9, 10]. Cases of patients with diagnosed and histopathologically confirmed metastases (after splenectomy) of this carcinoma in the spleen during the survival period are isolated and rare [11].

## Case Report

This paper describes a case of planocellular uterine cervix carcinoma metastasizing to the spleen two years after being detected and treated.

At the moment the primary tumor was detected the patient was 40 years old. Colposcopic examination detected a polypoid formation on the uterine cervix which bled on contact and was immediately subjected to biopsy. The biopsy was more complicated due to profuse bleeding, causing the patient to be rushed to the University Clinic of Gynecology and Obstetrics where the bleeding was taken care of. Invasive planocellular carcinoma of the uterine cervix in clinical Stage Ib according to FIGO was verified. Radical hysterectomy according to Wertheim-Meigs was preformed without operative and postoperative complications. Definite postoperative histopathological findings verified planocellular ulterine cervix carcinoma FIGO Stage Ib, histological grade G2NG2, without lymph and vascular invasion and without metastases in the removed lymph nodes. Considering the patient's age and tumor histological grade, oncological treatment was continued by administration of radiation therapy for a month, transvaginally and transcutaneously according to a suitable protocol. Undesired effects of radiation therapy were present: gastrointestinal discomfort, dermatitis and colpitis.

The patient underwent regular quarterly check-ups and was without signs of disease during the next two years. Exactly two years after surgery, Color Doppler ultrasound examination of the abdomen revealed two hypoechogeneous round lesions in the spleen 25 and 30 mm in size (Figure 1).

Doubt was raised about the presence of secondary deposits.

The patient thus underwent computerized tomography (CT) examination, but also this method was not able to give an accurate diagnosis. Nevertheless, during this diagnostic period which lasted about one month, the patient started to complain about pain under the left rib arch which spread to the left part of the dorsum, initially weak, but growing stronger, accompanied by irregular bowel movements and rice water stools. Finally, surgery was performed and the presence of metastases in the spleen was detected. Secondary malignant disease had perforated the spleen capsule in two areas on the outer side of the spleen (Figure 2).

Splenectomy was performed according to the standard surgical procedure. Based on abdominal cavity exploration it was ascertained that the malignant disease was in advanced stage. Secondary deposits affected the iliac cavities, extending towards the femoral region and completely surrounding the large blood vessels. Histopatological results confirmed existence of metastases of a very weakly differentiated planocellular carcinoma in the spleen.

The patient recovered well one month after surgery. However, during the second month after surgery the patient's condition progressively worsened. The gastrointestinal discomfort kept intensifying, causing general weakness and exhaustion. One month later exitus letalis occurred.

### Discussion

According to data from the literature, secondary deposits of various malignant tumors in the spleen are found in 0.002% of cases. They are more frequent in men

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Fig. 1

Fig. 3



Fig. 2

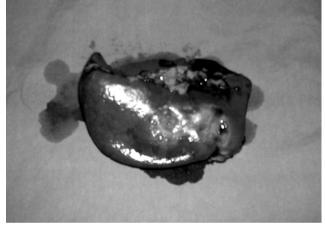


Figure 1. — Ultrasonographic image of spleen lesions.

Figure 2. — Macroscopic view.

Figure 3. — Rupture of the spleen.

Analysis of malignant tumors which metastasize to the spleen concluded that the most frequent are lung carcinoma (24.6%), followed by malignant skin melanoma (15.8%) and breast carcinoma (12.3%) [9]. Colorectal carcinoma, stomach carcinoma, hepatocellular carcinoma are next in frequency [12-14]. Metastases of carcinoma of uterine cervix have been described in material obtained during autopsy as micrometastases, while individual cases discovered during the survival period are extremely rare [5]. Only few such cases are known - most often the disease progression takes place two to three years after surgical treatment followed by radiation therapy in patients whose disease was in clinical Stage II when it was discovered.

All data published until now show that appearance of metastases in the spleen is the sign of an extremely poor prognosis. Average survival after splenectomy in all cases of surgically diagnosed metastases equalled approximately three months.

Diagnosing metastases can be a difficult issue [15-18]. Thus it requires the use of modern equipment, CT, magnetic resonance imaging and even positron emission tomography which has been described in the literature as the most precise method for detecting secondary deposits in the spleen. For the patient, the main problem is the

time which passes before clinical diagnostics and a decision about further treatment, considering the fact that metastases to the spleen are signs of advanced disease, i.e. of an extremely poor prognosis.

Another problem related to metastases in the spleen is possible rupture of the spleen and possible thrombosis of the lineal vein and all complications deriving from these two states. Figure 3 depicts rupture of the spleen in the case presented in this paper (Figure 3).

Rupture of the spleen has been described in several cases of lung, colorectal and breast carcinoma metastases [19, 20].

In recent years great importance has been ascribed to prevention, detection and timely treatment of asymptomatic lesions because this is the most efficient way of fighting against malignant diseases of the uterine cervix. This goal is best achievable by vaccination and systemic screening of the female population.

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