Choriocarcinoma complicated by a vaginal fistula, sepsis and hemorrhagic shock. Case report

E.F.C. Murta[1], *M.D., Ph.D.*; **R.S. Nomelini**[1], *M.D.*; **A.M.O. Rua**[2], *M.D.*; **S.J. Adad**[2], *M.D., Ph.D.*

[1]Discipline of Gynecology and Obstetrics, [2]Discipline of Special Pathology, Federal University of "Triângulo Mineiro" (FTM), Uberaba, MG (Brazil)

Summary

A case of poor prognostic choriocarcinoma developing sepsis is described. The patient was treated with vaginal drainage of pelvic abscess metastases, bilateral hypogastric artery ligation to prevent hemorrhage and single-agent chemotherapy.

Key words: Choriocarcinoma; Metastasis; Hemorrhage; Sepsis; Chemotherapy.

Introduction

Hemorrhage is a serious complication of choriocarcinoma metastases because of its intense vascularity [1]. Angiographic embolization and internal iliac artery ligation have been reported to be successful as treatment [2]. Acute abdomen [3] and necrosis of myometrial choriocarcinoma [4] with sepsis complicating multiple-drug chemotherapy have been described. To our knowledge, pelvic metastases of trophoblastic tumor with vaginal fistulae evolving to sepsis and hemorrhagic shock, treated with single-agent chemotherapy, has not been previously described.

Case Report

A 29-year-old white woman (gravida 2, para 1, miscarriage 1) was admitted in January 2003 with fever (38.5°C), anemia and discrete vaginal bleeding. Gynecological examination showed a palpable tumor in the upper third vaginal wall (5 cm in length) between the bladder, uterus and vagina with a fistula to the vagina (2 cm in diameter). After a miscarriage five months before, curettage was carried out by others (histology: trophoblastic disease). The patient did not continue the follow-up. Transvaginal ultrasonography is shown in Figure 1. Biopsy of the vaginal tumor showed necrotic tissue and a hemoculture revealed *Streptococcus* (group D). Systemic β-hCG levels were 1,194 UI/ml and leukocytes 14,300/mm^3. Total abdomal ultrasonography, head computed tomography (CT) scan and thorax X-ray were normal.

Antibiotic therapy and methotrexate (50 mg/m^2 IV, repeated each week) were initiated. Two days after the first chemotherapy cycle the patient developed septic shock. We performed vaginal drainage of the tumor (finger exploration of fistula) and prophylactic bilateral hypogastric artery ligation (BHAL, 1 cm of the iliac artery birfucation with nonabsorpive sutures). Due to hemorrhage the fistula, hand compression was indicated. Gauze packing was put into the vagina to tamponade the fistula (changed each day for 4 days). Methotrexate was reinitiated five days after surgery (total: 5 cycles). β-hCG levels were negative after the third cycle. Today the patient is well but a palpable tumor still persists.

Discussion

Abundant venous plexus is characteristic of choriocarcinoma metastases, illustrated in this case by ultrasonography with Doppler, with a consequent high risk of repeated and uncontrolled hemorrhage. Since sepsis developed, the patient underwent abscess drainage and prophylactic BHAL was indicated to avoid severe hemorrhage. This procedure can be successfully performed by embolization [1], but laparotomy was chosen to also verify metastasis extension. Ruptured metastatic tumors may occur in cases with multiple nodules or a single one (larger than 3 cm diameter) and in those lesions affecting the fornix [1]. Gauze packing was indicated since hypogastric ligation was not totally efficient in controlling hemorrhage. Pelvic collateral artery irrigation explains the persistent hemorrhage after BHAL.

Negative biopsy did not rule out a diagnosis of choriocarcinoma because β-hCG levels were high and chemotherapy showed efficacy [5]. Nevertheless with the poor prognosis, single-agent chemotherapy was indicated considering the patient's clinical condition. Complications of multiple-drug chemotherapy have been described, such as tumor necrosis of the uterine wall followed by fulminant sepsis [4], and pelvic abscess secondary to metastatic choriocarcinoma with acute abdomen [3].

In conclusion, the outcome of the present case showed that an exceptional evolution of choriocarcinoma with sepsis may occur in patients with vaginal metastases. Despite the risk of hemorrhage, abscess drainage may be considered before chemotherapy to prevent sepsis.

Acknowledgements and ethical aspects

We thank Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG). Written consent was obtained from the patient for publication of the study.

Revised manuscript accepted for publication September 9, 2005

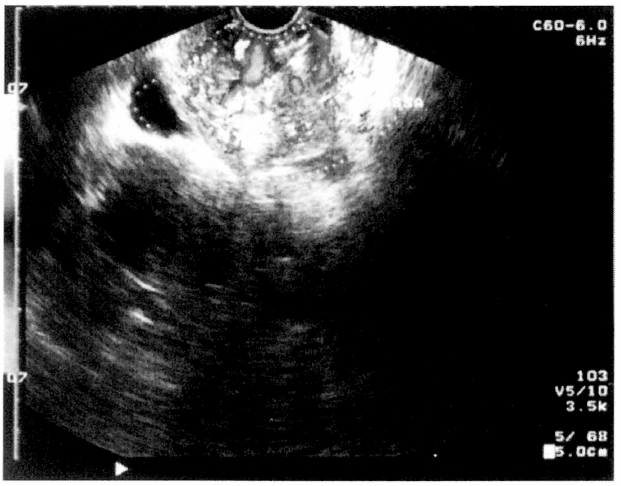

Figure 1. — Transvaginal ultrasonography with Doppler showed normal adnexae and uterus. A heterogeneous mass (7.6 x 4.3 x 6.2 cm, volume: 110 cm^3) is situated between the bladder, vagina and uterus with intense vascularity and gases inside.

References

[1] Yingna S., Yang X., Hongzhao S.: "Clinical characteristics and treatment of gestational trophoblastic tumor with vaginal metastasis". *Gynecol Oncol.,* 2002, *84,* 416.

[2] Vardar M.A., Altintas A., Demir S.C.: "Gestational trophoblastic disease: the significance of vaginal metastasis". *Eur. J. Gynecol. Oncol.,* 2000, *21,* 184.

[3] Velazquez M.T., Colo J.A.S.: "Abseso pélvico secundario a coriocarcinoma metastático". *Ginec. Obstet. Mex.*, 1988, *56*, 153.

[4] Odunsi K.O., Peck L.L., Kohorn E.I., Parkash V., Cracchiolo B., Chambers J.T., Taylor K.J.: "Necrosis of myometrial choriocarcinoma with fulminating sepsis complicating chemotherapy for trophoblastic tumor". *Gynecol. Oncol.,* 1998, *70,* 100.

[5] Menegaz R.A., Resende A.D. Silva C.S., Barcelos A.C.M., Murta E.F.C.: "Metastasis of choriocarcinoma to lumbar and sacral column". *Eur. J. Obstet. Gynecol. Reprod. Biol.*, 2004, *113,* 110.

Address reprint requests to:
E.F.C. MURTA, M.D., Ph.D.
Discipline of Gynecology and Obstetrics,
Federal University of "Triângulo Mineiro"
Av. Getúlio Guaritá,
s/n°, Abadia, 38025-440 Uberaba, MG (Brazil)