GESTATIONAL TROPHOBLASTIC DISEASES.
FEATURES, DIAGNOSIS
AND THERAPEUTIC PROCEDURES

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KEY WORDS

Gestational trophoblastic disease, choriocarcinoma, late disgravidie, hydatiform mole, invasive mole, premature birth, trophoblastic tumor.

INTRODUCTION

Gestational trophoblastic disease is a generic name given to several types of tumors that predominantly descend from placenta or germ cells and are mainly represented by hydatiform mole and choriocarcinoma.

In the past, because of the association of these tumors with a very high mortality, especially choriocarcinoma discussing here, treatment was also very complex and aggressive including both total hysterectomy with bilateral anexectomy, intraoperative irradiation of the affected area and local metastasis excision.

In most cases, the treatment proved to be ineffective, since the diagnosis was made quite late, when metastases were already widespread and numerous. Although currently the mortality and high morbidity rates of the trophoblastic tumors are high, they are significantly lower than in the past.

The overall conclusion is that the patient must be from the beginning very carefully investigated for evidence of any metastases, Considering the presence and location of any metastases, the patient is put into a specific risk group for which specific treatment is initiated.
STUDY OBJECTIVES

We analyzed gestational trophoblastic disease in our own terms for classification:
- benign lesions for placental chorionic plaque;
- malignant lesions for placental basal plaque.

We made this distinction in order to outset the difference between the hydatiforme/ invasive mole and choriocarcinoma and trophoblastic tumor of placental situs.

For me it was easier this classification, especially for the fact that apart from choriocarcinoma occurring after a hydatiform mole( especially without embrion), I had a case of choriocarcinoma with pulmonary metastases after a normal birth at term with live fetus, case described well as in my dissertation work. In this context we have also described a case of tubal choriocarcinoma with pulmonary metastases and brain surgery, but with poor prognosis considering all the onchostatic performed therapy. I generally noticed choriocarcinoma,,after the non embrionated hydatiforme mole with exception for the two cases mentioned above. Studying literature, both domestic and foreign, we extracted the following statement: both Choriocarcinoma and placental situs tumorsr occurring in 50% of cases after a hydatiforme mole. In other cases, they may occur after a normal birth at term, after a premature birth or after regular/ normal abortion.

In all the 10 years of studying the mole, on all the cases, I have never find a partially embrionated hydatiforme mole, but only totally non embrionated hydatiforme moles.There were some cases for patients having so-called anomalous ovular sac with no embryo into the uterine cavity. Originally these were considered as pregnancies stopped when evolving, in reality these cases proved to be more or less active molar pregnancies with increased values for plasmatic beta HCG.
MATERIALS AND METHODS

My study starts from 2004 until 2010 but the studied cases cover a much longer period, for 16 years (1995-2010).

The Gestational Trophoblastic disease is 1-2% of all gynecological malignancies and includes a spectrum of diseases that are characterized by abnormal development of the chorion, villous cystic degeneration, conjunctive distrophy and no villous vascularization with epithelial hyperplasia. I have to mention that this disease affects basically young women on full reproductive age, having a major impact on the family, socio-economical and professional areas.

The incidence of this disease is highly variable in different regions of the world. In my thesis I am referring in particular to the cases studied during the period 1996-2010 together with my distinguished coordinator Univ. Dr. Mihai Georgescu Braila in Obstetrics and Gynecology Clinic Emergency Hospital of Craiova.

Next, I will refer to cases diagnosed with gestational trophoblastic disease who were hospitalized and resolved over a period of 16 years compared to the total number of hospitalized abortion clinic and resolved cases during this period.

The parameters we considered for this study were represented by patients age, environment of origin, occupation, obstetric and gynecological history (abortions, premature births, births at term, ectopic pregnancy), clinical diagnosis, stage of pregnancy; paraclinical diagnosis.
RESULTS AND DISCUSSIONS

The first case is represented by a hypertrophic hydatiformă for a 16 years old patient. The hydatiforme mole appearance at a very young woman (16 years), followed by three physiological gestations in a period of only four years - I interpreted this as an accident/error of the first chromosome fecundity. The hydatiforme mole is known as an attribute of extreme age. Its incidence is 10 times higher in women over 45 and under 20 years compared to those aged 20-40 years.

For mole removal procedure, we opted for high way / abdominal considering the poor conditions for low discharge / vaginal, and the arguments raised by certain "schools" (particularly the Anglo-Saxon) for the need to completely evacuate the molar tissue (essential for preventing neoplastic transformation, especially in hypertrophic forms). After median sub umbilical celiotomy, followed low longitudinal histerotomy low once vesico-uterine peritoneum was being opened Evacuation has been made easy. It has been insisted on manual control and the control of surgery instrumentary ("spot").

Case II is the patient A.G. 19 years old, married, scraped 5 times for abortion with bleeding having 12 weeks of gestational age. These curettages were performed within 7 days incoercible bleeding.

The practice of the 6th hemostatic curettage is practiced for endouterin purposes. During the procedure, we found multiple purple lesions in the uterine wall suggesting that it is a pathology similar to a invasive mole invasive. There was need for radical surgery (total hysterectomy with the conservation for annexes) despite the young age of the woman.

The postoperative evolution of this patient was very good.
Case III. This case has a special feature in my thesis and it is represented by a uterine choriocarcinoma with pulmonary metastases and hemoptysis after a normal birth for a normal child.

The patient just has just given birth, A.T., a 26-year-old woman, was admitted to the emergency services after a spontaneously conceiving in Băilești Hospital. Based on clinical examination and laboratory results, she was diagnosed with postpartum choriocarcinoma and the oncology consultation was required. Once she was stabilized, she began the polichimiotherapy for choriocarcinoma. She followed this treatment for 2 months, then underwent radical intervention (total hysterectomy with Annexes conservation).

The postoperative evolution was good. 7 days after surgical repair, chemotherapy was performed for 4 months (systematic surveillance and gynecological oncology).

2 years after surgery and onchostatic treatment, the patient was present to the gynecologist and the clinical local and general state were very good.

Case IV. This case was represented by a 22-year old patient admitted to emergency for ectopic pregnancy, haemoperitoneum, peritoneal flood, hemorrhagic shock, anemia. The surgery was mandatory as there was an embedded tube inside the uterus. It was necessary to perform salpingectomy that was initially difficult to be done because of fragility of the peritubal and periuterine tissue.

Inside the abdomen, there were found about 2 liters of blood and clots. The histopathological examination confirmed the presence of tubal choriocarcinoma so, there was need for further surgery with total hysterectomy and bilateral anexectomy.

The patient was subsequently transferred to the Oncology Clinic for polychimiotherapy treatment.
CONCLUSIONS

1. The study was conducted in Obstetrics and Gynecology Clinic II for a period of 16 years (1995-2010). In this period were analyzed 4963 cases of which 226 were gestational trophoblastic disease cases, 4.55% in percentage.

2. In the context of gestational trophoblastic diseases we introduced as part of this thesis the term of Benign Chorionic Plaque with hydatiform and invasive moles and malignant lesions of placental basal plaque with choriocarcinoma and trophoblastic tumor of placental situs.

3. Chorionic plate benign lesions were Complete Hydatiforme moles with frequency 169 cases (3.4%) and Invasive Moles with 3 cases (0.6%).

4. Basal plaque malignant tumors had a reduced incidence of choriocarcinoma for 15 cases (0.3%) and 12 cases of trophoblastic tumor of placental situs (0.24%).

There were no cases of hydatiforme mole embryos, however I had a case of tubal choriocarcinoma.

5. The parameters I considered for this study were related to patients' age, provenance, profession, admission reasons, paraclinical diagnosis, treatment.

6. I felt that my work is representative to call into question some particular cases requiring special treatment surveillance and chemotherapy, and surgery.

7. A particular case of non embrionated hydatiforme mole was the one patient of 16 years with hypertrophic mole abdominal evacuated by the histerotomie, taking into account gestational age (7-8 months uterus proven by clinical and ultrasound procedure). After giving birth, the patient followed an
adjuvant treatment with methotrexate and contraception for 14 months.

She then had an abortion with no complications low procedure done and then she presented two other pregnancies on time, solved by high abdominal (bilateral tubal ligation caesarean sections after the last intervention).

8. A second case reported in my study was represented by invasive mole on a woman 19 years who had 5 surgeries after bleeding for 7 days.

Coming from another clinic, a patient underwent curettage endouterin purpose hemostatic maneuver continuing with high abdominal approach.

During the surgery, we found that it is an invasive mole with numerous infiltration in the uterine wall, which imposed radical surgery, total hysterectomy with conservation for the annexes.

Histopathological examination confirmed that it is an invasive mole and not a choriocarcinoma.

9. The third case I've noticed in my PhD topic was represented by a uterine choriocarcinoma with pulmonary metastases and hemoptysis after a normal birth at term with normal child.

The pregnant woman was admitted to the emergency department ATI, where he began chemotherapy treatment under the head doctor of the oncology clinic. She was transferred to the Oncology Clinic, where he continued polychemotherapy treatment for 2 months. After 2 months, considering the oncologist and gynecologist opinion, total hysterectomy with conservation Annexes was practiced because the woman was 26 years old.
The aftersurgery evolution was very good and she continued chemotherapy for the next 4 months.

10. My last specific case was represented by a tubal choriocarcinoma for a woman aged 22, hospitalized with ectopic pregnancy and peritoneal flood. As emergene, laparotomy is practiced, finding an embedded tube in the uterine body. It was necessary that a right salpingectomy was performed initially and extemporaneous histopathological examination revealed a tubal choriocarcinoma. A radical surgery with total hysterectomy with bilateral anexectomy was imposed. The patient was subsequently transferred to the Oncology Clinic for polichimiotherapy.

11. All these cases confirm the importance of gestational trophoblast disease both in incidence and in severity. To solve such cases, it is required a very good interdisciplinary collaboration between gynecologist - oncologist - pathologist – paraclinical dynamics.

12. Hydatiforme mole is the pathology most often seen in the cases analyzed by me. In this category as benign lesion we found only Complete Hydatiforme Moles. We had no cases of non-embryonated hydatiforme moles.

13. We noticed that hydropic degeneration of chorionic villi represent approximately 50% of cases that may degenerate into choriocarcinoma.

14. We also noticed that choriocarcinoma may occur in another 50% of cases after a normal pregnancy at term or after a so-called ectopic pregnancy with tubal location.

15. Your doctor should always be interested in these practical issues that we've presented, knowing both the incidence, severity and unexpected developments of anatomical-clinical forms of gestational trophoblastic disease.