INVASIVE MOLE - CASE REPORT OF MASSIVE UTERINE DESTRUCTION

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Abstract

Patient with malignant Gestational Trophoblastic Neoplasm (GTN) was treated by mean of MTX-FA, MAC, EMA-CO and EMA-EP. Changes in serum human chorionic gonadotropine (beta hCG) levels and changes in ultrasonographic findings were checked weekly. Finally transabdominal hysterectomy with ovaries conservation was done and polychemotherapy administrated after the operation until three consecutive serum chorionic gonadotropine values were negative.

This is a case report of Invasive mole in 32 years old patient without possibillity to preserve reproductive health. GTN developed two months after spontaneous abortion in 13th week gestation. No changes in uterine structure were found during the first ultrasonographic examination. Three months after abortion and one month after GTN confirmed, massive destruction of lateral uterine wall was detected during transvaginal Doppler ultrasound examination. Resistance index of 0,366 was significantly lower than normal, with hypervascularisation in affected tissue. Serum beta hCG confirmed poor effect of polychemotherapy treatment and decision for operative treatment was made.

Hystological findings after the operation confirmed malignant GTN- invasive mole. Specific changes in ultrasonographic picture could have an impact in therapy making decision and could not be refereed without the most relevant parameter such is serum human chorionic gonadotropine.

KEY WORDS: gestational trophoblastic neoplasm, human chorionic gonadotropine, resistance index, transvaginal Doppler ultrasonography.

Introduction

Malignant GTN can develop as Invasive mole, Choriocarcinoma and Placental site trophoblastic tumor. Ovaries theca luteal cysts usualy follow malignant GTNs. Reproductive organs can be seriously damaged in malignant GTNs. Early diagnosis and treatment according to accepted protocols could preserve reproductive health in patients with malignant GTN. Serum human chorionic gonadotropine is of a great value for early diagnosis as well as in checking the effects of treatment.

Subject and Methods

All patients suspected on GTN were hospitalised in our Department and treated after clinical and laboratory examinations. Serum human chorionic gonadotropine was checking weekly during and after the treatment until three consecutive values were negative. Transvaginal Doppler ultrasonography was done at the beginning of the hospitalisation and repeated during and after the treatment. Resistance index values were measured especially in the fields of hot spots and neovascularisation. In malignant GTNs mono or polychemotherapy was administrated according to clinical picture and beta hCG values. This patient (Case report) was treated according to MAC, EMA-CO, EMA-EP and MTX-FA regimens.

Case report

Patient 32 years old, 0 para, 1 gravida, with regular menstrual cycles was hospitalised because of nausea and amenorrhea two months after curettage done post spontaneous abortion at 13th week gestation. Transvaginal Doppler ultrasonography done and no changes in uterine structure or residual tissue were found. Endometrial thickness was 5,5 mm. Serum human chorionic gonadotropine (beta hCG) was 107265 IU/l and showed increasing rate (117531 IU/l - 124391 IU/l). GTN extended to lungs. Chest x-ray confirmed metastases. Head x-ray excluded metastases in brain. According to FIGO staging and scoring system for GTN (FIGO 2000) this patient was GTN-stage III and low risk GTN-score 6. Chemotherapy administrated and MAC regimen was repeated every 2 weeks during two months. Serum hCG showed decreasing rate from 124 391 IU/l to 6133 IU/l when started increasing. We continued chemotherapy with EMA-CO regimen. Transvaginal Doppler ultrasonographic findings showed changes in homogenicity of the left lateral uterine wall with Resistance Index 0,471 (referent value is 0,5) and significant hypervascularisation in changed tissue. Five months after spontaneous abortion ultrasonographic picture showed significant massive tissue destruction (Figure 1) with Resistance index of 0,366. There were no theca luteal cysts on ovaries. After a failed course of EMA-CO regimen we decided to administrate cysplatinum (100 mg/m2) on day 8 with etoposide 100mg/m2 (EMA-EP).

Serum human chorionic gonadotropine has decreasing rate to the level of 2433 IU/l when started increasing again. According to increasing serum human chorionic gonadotropine (2720 IU/l, 3745 IU/l- 5691 IU/l in ten

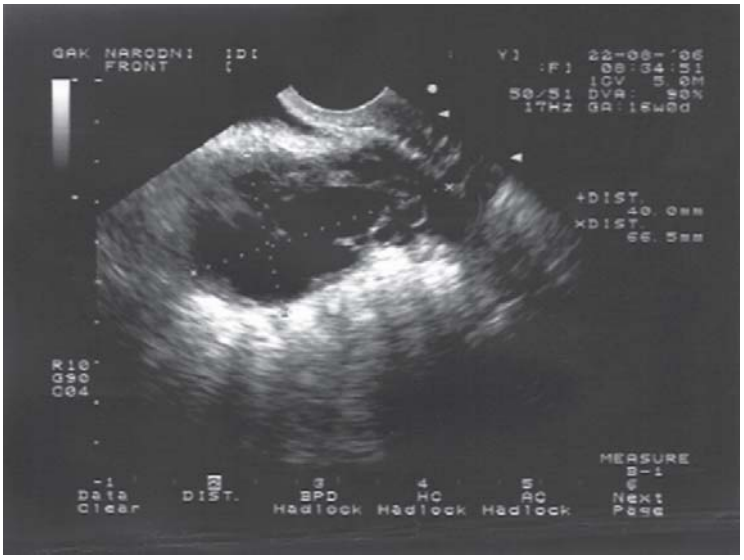

FIGURE 1. Invasive mole 32-year old patient (massive destruction of uterine wall) (between arrows)

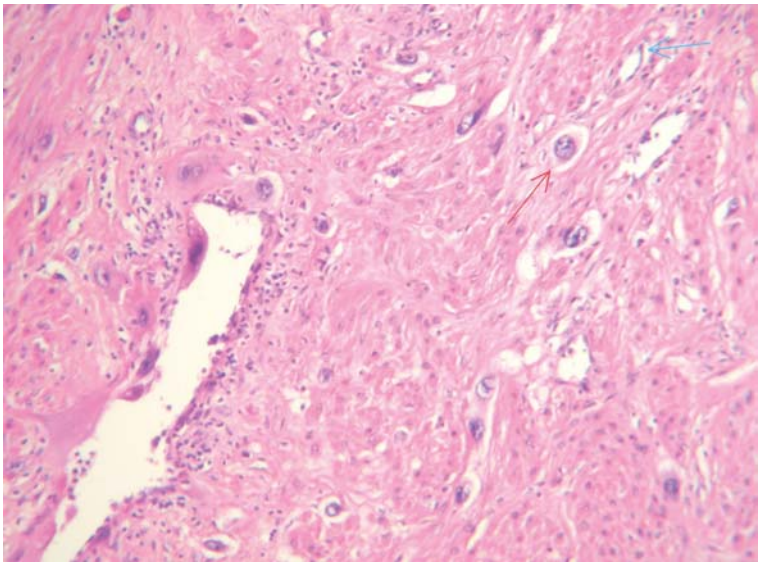

FIGURE 2. Single atypical trophoblastic cell in invasive hydatidiform mole (red arrow) and newly formed vascular channel as a sign of vascular genesis (blue arrow)

days), failed MAC, EMA-CO and EMA-EP treatment, ultrasonographic findings, abdominal classic hysterectomy with conservation of both ovaries was done. Two days after the operation serum hCG was 568 IU/l. Repeated x-ray excluded metastases in lungs and in brain.

Chemotherapy treatment proceeded with MTX-FA (Methotrexate-Folinic acid). Treatment was successful and serum hCG showes decreasing rate. Finaly, after 11 months three consecutive serum hCG values were negative. Postoperative hystological examination of uterus confirmed malignant GTN-Invasive mole (Figure 2).

Results

This patient had long and complicated treatment. Different therapy regimens did not get expected results until the decision for operative treatment was made. Ultrasonographic confirmation of massive destruction in uterine structure was also of a great help. In this patient we could not preserve reproductive health but finally the treatment of this progressive malignant GTN was successful.

Discussion

Serum human chorionic gonadotropine is the most relevant parameter in GTN detection as well as in checking the efficacy of administrated therapy (1,2). Successful treatment of malignant GTN does not mean that reproductive health can always be preserved. Chemotherapy plus hysterectomy is sometimes the method of choice in advanced malignant GTN treatment (1,2,3,4,). Transvaginal Doppler ultrasonography could sometimes be useful diagnostic approach in GTN detection and therapy making decision. Malignant GTN do not have specific ultrasonographic picture and it is not easy to detect nonspecific changes in uterine structure. Massive tissue destruction, hot spots (hypervascularisation), low Resistance index and ovary theca luteal cysts could be characteristic ultrasonographic findings for malignant GTNs. Low Resistance Index value is usually measured in malignant tissue with neovascularisation (5,6). According to Reccomendation CRCOG, ultrasonography is of a limited value in detection of partial mole and malignant GTNs (5,6).

Conclusion

Progressive changes in uterine structure could be of a great help in making therapy decision, especially in GTN where chemotherapy have failed and serum hCG had increasing rate.
Treatment can be long lasting with good prognosis but it needs good collaboration between gynecologist and patient including all kinds of support.

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