Gestational Trophoblastic Disease with Metastasis to Kidney. Case Report

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گزارش یک مورد متاستازکلیه در بیمار با کوریوکارسینوم ترفوبلاستی

خلاصه

مقدمه و هدف : کوریوکارسینوم شایع ترین تومور بدخیم ترفوبلاست حاملگی است. این سرطان سریعاً رشد کرده وبه اعضای مختلف بدن مثل ریه – مغز- کبد- متاستاز می دهد. سایر قسمت های بدن به ندرت مبتلا به متاستاز کوریوکارسینوم می شوند. دراین مطالعه، یک مورد کوریوکارسینوم با متاستاز به کلیه معرفی می شود.

گزارش مورد: دراین مطالعه خانم مبتلا به کوریوکارسینوم با متاستاز مناطق مختلف معرفی می شود. بیمار به علت خون ریزی طولانی مهبلی به دنبال زایمان که در٥ ماه قبل داشت همراه با سردرد مقاوم به دارو مراجعه کرده بود. در بررسی انجام شده تشخیص کوریوکارسینوم با متاستاز به کبد- ریه – مغز و هر دو کلیه داده شد. بیمار با شیمی درمانی و پرتودرمانی مداوا شد و بعد از ٦۰ ماه در پی گیری مکرر از بیمار فعلاً کاملاً بهبود یافته است .

کلمات کلیدی : کوریوکارسینوم، بیماری ترفوبلاستیک حاملگی، متاستازکلیه، شیمی درمانی، پرتودرمانی.

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Introduction :

Gestational trophoblastic tumors (GTT) are rare but highly curable. These tumors originate from the products of conception in the uterus (1). GTT is the most curable cancer of the female reproductive organs even in the disseminated stages (2,3).

Choriocarcinoma of the kidney, either primary or metastatic, has rarely been reported (4,5).

In a survey on medical literature, we encountered the data of reported unusual renal manifestions of choriocarcinoma (6).

In one study, the incidence of 6.9% renal metastases following choriocarcinoma was reported(7).

Soper reported eight patients with kidney metastasis from choriocarcinoma, six cases of which had been under nephrectomy (8). GTT are very sensitve to chemotherapy and complete response to this treatment method without any sign of recurrence in a few cases reported (9). However, as a result we present a bilateral renal involvement of choriocarcinoma which brifely responded to chemotherapy .

Case report:

A 23-year-old woman was referred to us with the following symptoms: fever and chills, nausea, vomiting, headache, and vaginal bleeding and was admitted to our hospital.Five months before, she had her first delivery which was normal and followed by a healthy newborn. She was breast feeding and her contraception of method pregnancy was natural method.

After her delivery she suffered from prolonged vaginal bleeding that had not been diagnosed at that time .

In her past medical history, no specific diseases had been traced. In her first medical admission here, she was in a crucial state ,she was in subcoma. In physical examination ,we found hepatomegaly. The liver was so enlarged that it was five centimeters below the ribs, palpable and sensitive.

In pelvic examination , uterus was as large as a uterus in 8-10 weeks of pregnancy . Vaginal bleeding was moderate,and there was no sign of vaginal metastasis .Because she suffered from fever we recommended blood and urine cultures. The results were nagative and normal. Renal and liver function tests showed approximately normal level. Measurment of titer βhcG serum was recommended and $938000^{IU}/_{ml}$ was reported.

In pelvic sonography, there were signs of uterus enlargement, but no signs of tumor invasion in uterine cavity were reported. Abdominal ultrasonography represented a larger than normal liver with multiple hypoechoic, round lesions in the right lobe of liver parenchyma (Fig 1). In evaluation of kidney observation, the size of the right kidney was 120×45cm, and in the kidney parenchyma, there were two hyperechoic areas similar to the lesions in her liver that deviated the sinuses of kidney. In this lesion necrosis could also be seen. The size of the left kidney was 125×58cm and one large, hyperechoic, and necrotic mass with 82×52cm was observed (Fig2). In chest X-ray, the right lung had two round masses (6×7cm) in the middle zone (Fig 3). Brain CT-Scan showed the pattern of a definite hypodense area in the brain's right lobe in the occiput region. In addition, she had severe brain edema in left parietal and mild hydrocephaly (Fig 4). All this led to the diagnosis of metastatic GTT in the brain, liver, right lobe of lung and both kidneys.

Then a scoring system was carried out for this patient, and the minimum score was fourteen. Chemotherapy with EMA-CO regimen, accompanied by brain radiotherapy with the amount of 5000-cGy in 200 fractions was started as the first line in treatment.

After six courses of chemotherapy, hcG titer dropped to normal level, and investigation procedures showed, liver, lung, brain, and kidney methastases which completely disappeared subsequently.

After these procedures, our treatment was followed by two courses of chemotherapy for reassurance.

Now, after sixty months, our patient is under control and serial follow-up, and she is well with no sign of recurrences, and only her problem is incomplete alopecia.

Discussion :

Renal involvement in choriocarcinoma is attributed to tumor destract and metastasis to the kidney (10). Renal metastasis is invariably preceded by pulmonary metastases and usually accompained by other veseral metastases indicating that renal metastases is the result of dissemination of tumor cells; and secondarily from lung metastasis through the general circulation which should be categorized as arterial metastases. Pylogram is useful in the presence of medullary invasion by the tumor (7). Most renal tumor metastases are small and hypovascular enhancing less than normal renal parenchyme. Followed by contrast administration, large lesions can be

indistinguishable from renal cell carcinoma (11). In one study it was reported that intravenous urography was performed in 289 patients at the time of the diagnosis of malignant gestational trophoblastic disease. Ninety – five percent of these cases were normal . In the detection of renal metastases, false – positive and false – negative intravenous urogram was encountered. It is concluded that intravenous urogram lacks sufficient sensivitiy and specificity in the detection of renal metastasatic GTT (12,13).
A distingushing feature of primary renal tumor is renal vein involvement, which is very rare with metastasis (8).
In our study, we did not use urography, and kidney metastasis lesions had been diagnosed via sonography .
In sonography a mass with a large hyperechoic and necortic pattern in both kidneys had been seen. Renal function tests were normal and microscopic hematuria had been seen.
Huange reported a case of choriocarcinoma with unilateral mass and gross hematuria. His patient responded briefly to PVB chemotherapy (4). While our patient had been cured briefly with EMA-co regime. In one study between 1968-84, eight women with renal metastases of GTT were reported who had coxistent pulmonary metastases and four of them had central nervous system involvement. These women are still alive after receiving multiagent chemotheraphy and nepherectomy as a treatment (8). We did not need nephrectomy for our patient. She had complete response to chemotherapy, and all of her metastases disappeared.

Conclusion:

Renal metastasis from choriocarcinoma is rare and proved to be curable, as can be seen in this report.

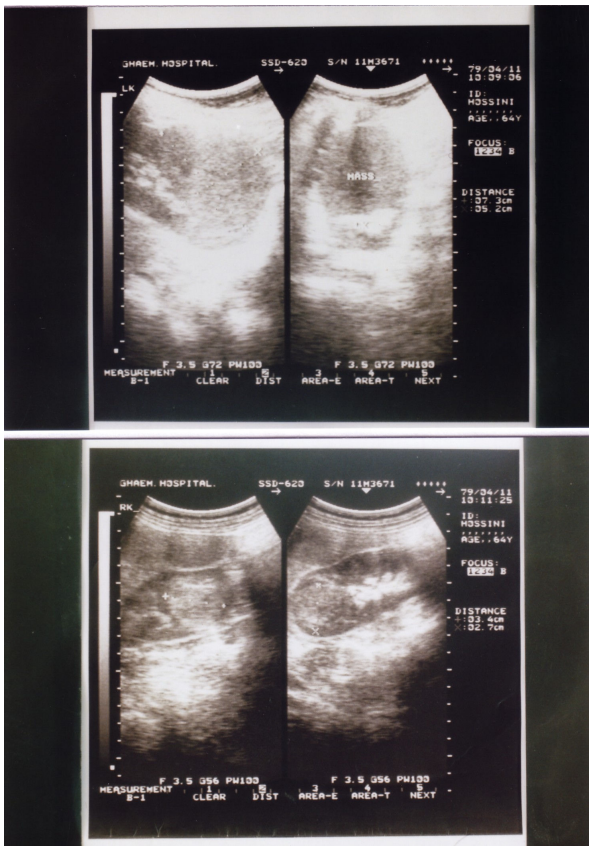

Fig 1 : Sonography of the liver :Multiple hypoechoic round lesions in the right lobe.

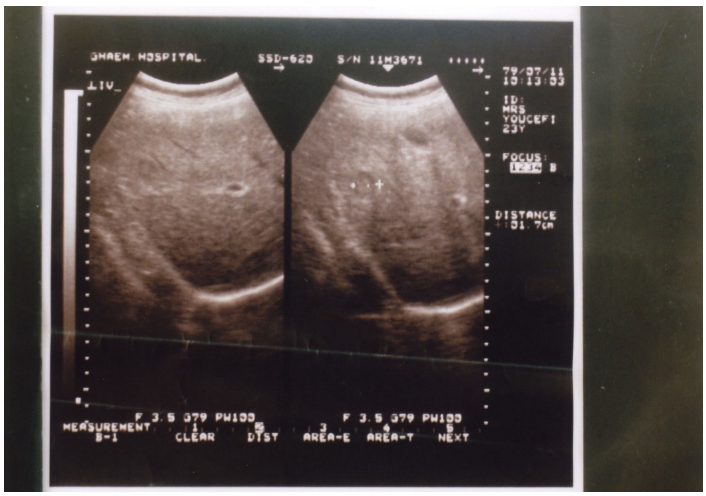

Fig 2 : Sonography of the kidneys : In the R.kidney two hyperechoic and necrotic area , the deviated sinuses of the kidney, and in the L.kidney a large hyperechoic and necrotic mass 82× 52 cm were seen.

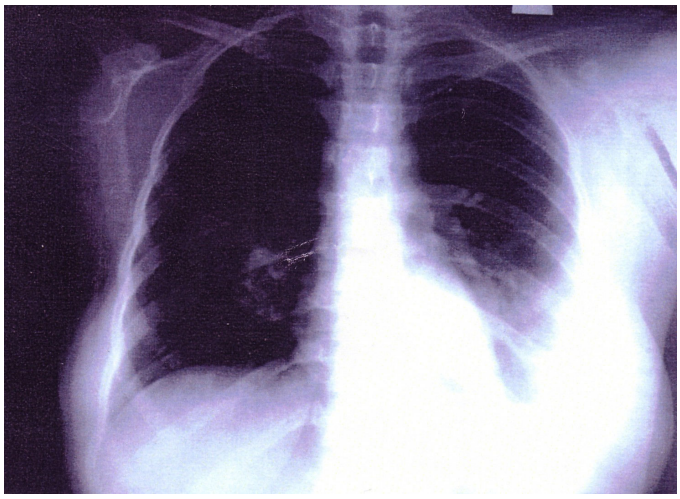

Fig 3: Chest X-Ray of the right lung showed two round masses in the middle zone

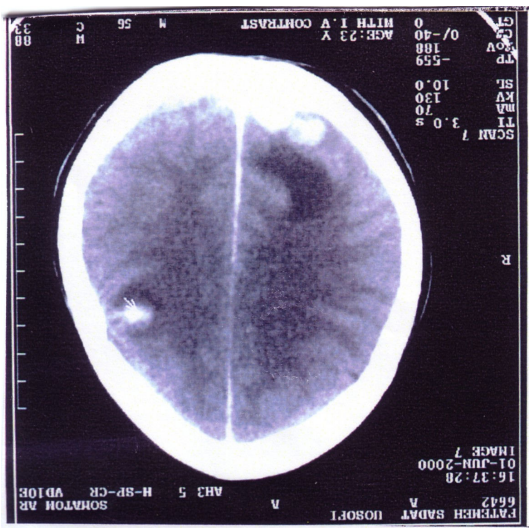

Fig 4 : Brain CT-Scan :Hypodense mass in occiput region.

Abstract

Introduction and Objective: Choriocarcinoma is the most malignant tumor of the gestational trophoblastic neoplasm . It grows rapidly and metastasizes to the lung , liver, brain, and less frequently to the other organs.
Renal involvement is rare, however we encountered a female patient with metastatic choriocarcinoma of the both kidneys.
Case report: In this article a young woman with multiple metastases from choriocarcinoma is presented. She suffered from prolonged vaginal bleeding, permanent headache, and fever only five months after her first vaginal delivery. Investigation revealed uterus choriocarcinoma with multiple metastases to lung and liver, brain, and both kidneys. Our patient was treated with chemotherapy, radiotherapy and at the end of these treatment all metastases was cured.
After a period of sixty months of treatment in serial follow-up , she is well with no sign of recurrent disease.

Key Words: Choriocarcinoma, Chemotherapy, Radiotherapy, Renal metastases.

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