

Post-hysterectomy choriocarcinoma with pulmonary and renal metastases

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Summary

The propensity of choriocarcinoma to metastasize to lungs, liver and brain is well known. Though theoretically metastases are possible to anywhere in the body, renal metastases are rare. A 56 year old Malay woman who had total abdominal hysterectomy in 1985 for molar pregnancy presented with haemoptysis and dyspnea in 1990. Examination showed she had choriocarcinoma with pulmonary and renal metastases.

Key words: Choriocarcinoma, pulmonary and renal metastases.

Introduction

Choriocarcinoma is the haemorrhagic cancerous lesion of trophoblast rapidly metastasizing to lungs, liver and brain characterised by the secretion of hCG. It occurs with its highest frequency in tropical and subtropical regions. Choriocarcinoma can occur with absent primary lesion, or follow a sequence of pregnancies. Bilateral tubal ligation, hysterectomy or menopause need not preclude the development of choriocarcinoma. The following case report illustrates the need for life-long follow-up of patients with history of molar pregnancy.

Case history

In 1985, a 52 year old Malay woman, P11 + 0, presented with pregnancy symptoms. All her previous 11 pregnancies were uneventful. Her last child birth was 19 years ago. Examination showed a uterus of 18 weeks' size. Ultrasound scan showed molar pregnancy. Her β hCG level was 640,000 iu/L. There was no evidence of metastasis in liver or lungs. In view of her age, total abdominal hysterectomy with bilateral salpingo-oophorectomy was done. She was then followed up at the trophoblastic disease clinic. The β hCG showed consistent fall and she was discharged from the clinic on 15.4.87 (Fig. 1).

She was admitted 33 months later, to the medical ward with haemoptysis, dyspnoea of increasing severity for 3 months and left sided chest pain. On examination, she was found to be pale and dyspnoeic. There was decreased air-entry to both sides of the lungs. There were no palpable abdominal masses. β hCG level was 204,800 iu/L. A chest roentgenogram showed metastases on both sides of the lungs with massive secondaries more on the left side. Abdominal ultrasound examination was done to look for liver metastases. Though there were no liver secondaries, a large mass measuring 86.9 mm x 6 mm was found at the right kidney (Fig. 2b).

She was started on triple regime chemotherapy consisting of methotrexate 10mg daily x 5 days, actinomycin 0.5 mg daily x 5 days and etoposide (VP 16) 100 mg daily x 2/7. There was a dramatic response to chemotherapy. Repeat examination after third course showed significant changes in the

pulmonary and renal metastases (Fig 3a and 3b). She was to have had repeat examination after the sixth course but the patient defaulted after the fifth. β hCG level however reached very low levels (Fig. 4.) As the patient felt clinically very well, there had been little success in convincing the patient to attend further examination and treatment. The last home visit was on 29/12/90 and she was alive and well.

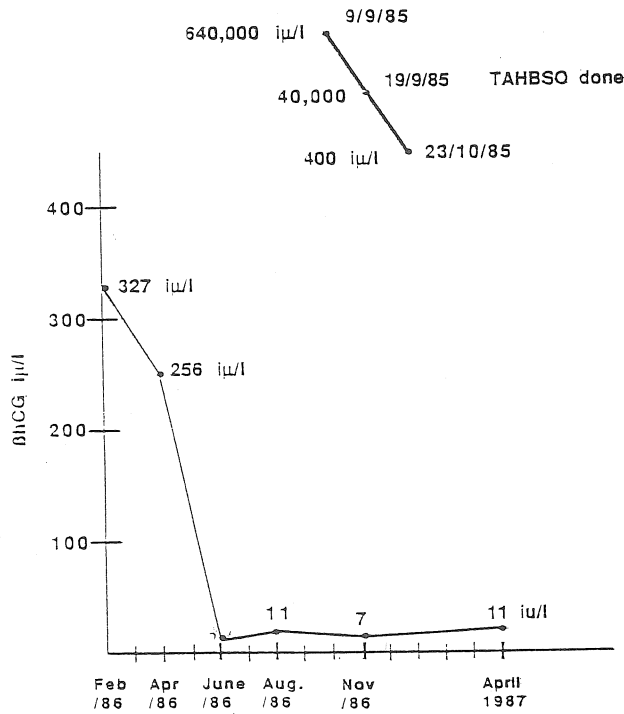


Fig 1 : Regression pattern of β hCG after TAHBSO in 1985



Fig 2 (a) : Chest X-ray shows massive lesions on left side with smaller lesions on right lung.

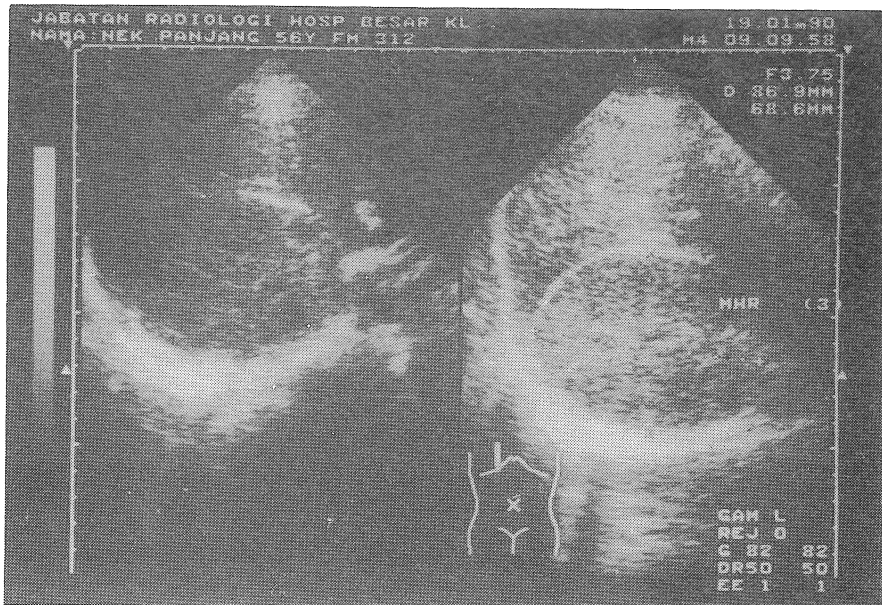


Fig. 2 (b) : Ultrasound of right kidney with renal mass measuring 86.9 mm x 68.6 mm

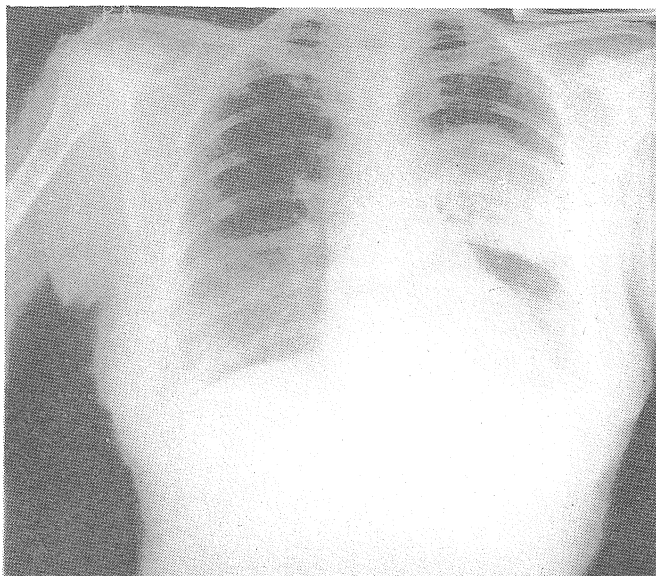
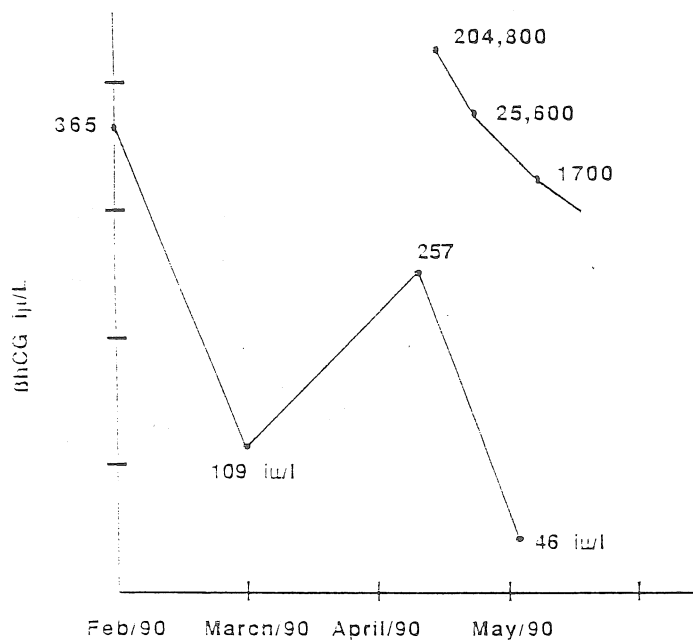


Fig. 3(a) : Chest X-ray after 3rd course of Chemotherapy



Fig. 3 (b) : Ultrasound of renal metastasis measuring 61.0 mm x 57.1 mm



1st Chemo	- 12/1/90	4th Chemo	- 16/4/90
	16/1/90		20/4/90
2nd Chemo	- 3/2/90	5th Chemo	- 5/5/90
	7/2/90		3/5/90
3rd Chemo	- 2/3/90		
	6/3/90		

Fig. 4 : Regression pattern of βhCG

Discussion

Absence of primary lesion in metastatic choriocarcinoma is not an uncommon phenomenon (Ober et al, 1971). Choriocarcinoma occurring 14 years after bilateral tubal ligation has also been reported (Lathrop et al, 1978). Sinha (1987) reported choriocarcinoma developing 4 years after hysterectomy for placenta percreta. Ogunbiyi (1986) reported 2 cases of choriocarcinoma presenting with haematuria and renal enlargement in the absence of primary malignant uterine foci. It is possible therefore that the trophoblast may remain dormant for more than a decade and thus neither hysterectomy nor tubal ligation need preclude the development of choriocarcinoma.

The use of ultrasound for diagnosis of molar pregnancy need not be elaborated. We feel that ultrasonography is the method of choice to search for hepatic metastasis. Though radiologists use ultrasound for investigating renal pathology, its use in diagnosis of renal metastasis in choriocarcinoma is perhaps reported for the first time.

Combined with a β hCG measurements, serial chest roentgenograms, CT scan of brain, ultrasonography of liver and, as in this case, the kidneys can be a useful way of monitoring the response to treatment.

References

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