

MANAGEMENT OF CHORIOCARCINOMA

DILIP K. CHAKRABORTI

SUMMARY

Introduction of systemic chemotherapy and assessment of the malignant gestational trophoblastic disease using prognostic scoring system (WHO) and staging (FIGO) has revolutionised the management and outcome of the disease. Low risk and medium risk cases are treated with single agent Chemotherapy (Methotrexate) with success. Surgical treatment is undertaken only in few selected cases due to drug resistance and or uterine haemorrhage.

A total number of 27 cases of choriocarcinoma have been treated during the period from 1987 to 1995. Complete cure has been achieved in over 90% cases (90.9%) in low risk category with single agent chemotherapy; 4 cases had both chemotherapy and surgery (14.8%); 3 cases (11.1%) died during the course of treatment due to recurrent massive haemorrhage and noncompliance to multiagent chemotherapy.

INTRODUCTION

MANAGEMENT OF CHORIOCARCINOMA

Major advances has taken place in the management of malignant trophoblas-

tic disease. It is now possible to achieve a high cure rate in patients with advanced disease. Introduction of systemic chemotherapy completely revolutionised the management and outcome of the condition. The National Institute of Health (NIH) and WHO have scoring system for differentiating patients into high risk and low risk groups

Dept. of Obst. Gynae., Medical College, Eden Hospital, Calcutta & Kothari Medical Centre & Research Institute Calcutta.

(Rivlin, 1990). WHO Scientific group adopted a simplified prognostic scoring system. This becomes the most commonly used scoring system (Ma et al, 1990) and followed in this current study. Screening of high risk population for trophoblastic disease based on epidemiological study have also been conducted (Chakraborti, 1994). Low risk cases are treated with single agent chemotherapy and high risk cases are treated with multiagent drugs in spite of its toxicity. Surgical treatment is indicated only in few selected cases. In cases of drug resistance surgical treatment in combination with chemotherapy improved the survival rate.

MATERIALS AND METHODS

A total number of 27 cases of choriocarcinoma were diagnosed and treated during the period from 1987 to 1995. 24 cases were treated at the Eden Hospital, Medical College Calcutta till 1993. Subsequently another 3 cases were treated at the Kothari Medical Centre, Calcutta from 1993 to 1995. All the cases had pre-chemotherapy evaluation as follows:-

- 1) History : Age, Parity, socio-economic status, antecedent condition (hydatidiform mole, abortion, term pregnancy).
- 2) Physical examination general examination, evidences of distant metastasis, pelvic examination.
- 3) Investigations : Blood (Haemoglobin, T.C., D.C., Platelets, Blood group, L.F.T., blood urea, serum hCG level); Urine (routine test, urinary hCG level);

X-ray chest, USG (abdomen and pelvis), C.T. scan; Biopsy (endometrium, metastatic nodule).

Prognostic scoring-WHO Prognostic scoring was followed in the current study as mentioned earlier. Out of 27 cases 24 were in low risk and medium risk groups and 3 cases were labelled as high risk category.

RESULTS AND ANALYSIS

CHEMOTHERAPY TYPES :

Low risk and medium risk cases were successfully treated with single agent chemotherapy. In the present study all such cases were treated with Methotrexate. Cases belonging to high risk group were treated with multiagent drugs as follows :-

(A) Low and Medium risk group :
Single agent drug :

Methotrexate : 1 mg per Kg body weight, I.V. on days 1, 3, 5, 7.

Folinic Acid : 0.1 mg per Kg body weight, I.M. on days 2, 4, 6, 8.

(B) High risk group : Multi agent drugs :

Methotrexate : 1 mg per Kg body weight I.V.

Actinomycin D : 12 mcg per Kg body weight I.V.

Cyclophosphamide : 3 mg per Kg body weight I.V.

on days 1, 3, 5

Folinic Acid : 0.1 mg per Kg body weight I.M.

Actinomycin D : 12 mcg per Kg body weight I.V.

Cyclophosphamide : 3 mg per Kg body weight I.V.

TABLE I
INCIDENCE AND TYPES OF TROPHOBLASTIC
DISEASE (1987-1995)

(1) Incidence and Types (1987-1992)	:	Medical College Calcutta (Eden Hospital)
Total delivery	GTD	Incidence
46558	136	1/342
H.Mole	Choriocarcinoma	
112	24	
1/416 (h.Mole)	1/1940 (Ch.Ca)	
(2) Incidence and types (1993-1995)	:	Kothari Medical Centre 3 case of Choriocarcinoma were treated.

on days 2, 4.
Folinic Acid : 0.1 mg per Kg body weight I.M.
on day 6, 8.
Methotrexate : 1 mg per Kg body weight I.V.
on day 7.

CHEMOTHERAPY MONITORING :
(a) For drug toxicity : Blood for haemoglobin, TC, DC, Platelets, LFT and Renal functions weekly.
(b) For response to treatment: hCG estimations weekly, X-ray Chest before each course.

TABLE II
RESULTS OF TREATMENT

Total Cases	Treatment given		Cured/ Control	Death
	Chemotherapy alone	Chemo. and Surgery		
27	23	4	24	3

A minimum period of 7 days' rest period was given before each course of chemotherapy. During this rest period supporting treatment given accordingly.

SURGICAL TREATMENT :

Out of 27 cases, in 4 cases surgical treatment in the form of hysterectomy with bilateral salphingo-oophorectomy was undertaken.

In 3 cases during the course of chemotherapy at certain stage hCG plateau was observed and there was no further improvement. Under such circumstances hysterectomy followed by further courses of chemotherapy resulted in control of the disease.

In one case there was massive uterine haemorrhage for which hysterectomy was undertaken during the initial period of treatment.

In 2 cases with vaginal metastasis while attempting to take biopsy there was uncontrollable haemorrhage. Available resuscitation failed to save the patients. The third case died during multi-agent chemotherapy due to non-compliance.

DISCUSSION

The optimal management of choriocarcinoma requires proper evaluation of the extent of the disease before treatment. The management depends on the stage of the disease (FIGO) and risk factors. The scoring system helps to mark the risk types, prognostication and management. Berkowitz et al (1995) mentioned that in Stage-1 disease single agent chemotherapy induced complete remission

in 93.5% of cases. In this study out of 27 cases 22 were in Stage-I and low risk category. Out of 22 cases 20 cases were cured (90.9%) with single agent chemotherapy. Complete remission is an hCG titre in normal range (less than 5mIU/ml serum) for 3 consecutive weeks. In 2 cases with vaginal nodule (Stage-II) patients had recurrent massive haemorrhage while attempting to take biopsy. It has been emphasised that biopsy of a choriocarcinoma can be lethal. Vaginal metastasis communicate with the greatly dilated arteriovenous network and biopsy carries considerable risk of severe bleeding. With the success of chemotherapy surgical treatment had a limited place in the management. Surgical resection is mostly used to remove a tumour that has developed drug resistance (Ma, et al 1990). In this present study in 4 cases surgical treatment in the form of hysterectomy was undertaken (14.8%) due to temporarily non-responsiveness to chemotherapy and uterine haemorrhage. If the patients no longer wishes to retain fertility, hysterectomy with adjuvant single agent chemotherapy may be performed as primary treatment. Berkowitz et al (1995) mentioned that hysterectomy may be required with metastatic GTT to control uterine haemorrhage or sepsis and also in bulky uterine tumour.

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CASE REPORT

INTRAMYOMETRIAL ECTOPIC PREGNANCY

Dr. S. V. ...

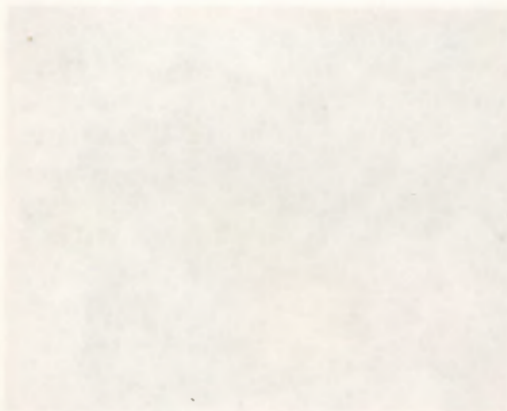


Fig. 1. ...

... of the embryo within the ...

CASE REPORT : 40 years ...

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