



Research Article

TREATMENT OUTCOME ANALYSIS OF MOLAR PREGNANCY IN TERTIARY CARE CENTRE AND ITS RELATION TO REFERRAL PATTERN

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ABSTRACT

Background: Gestational trophoblastic tumours commonly known as GTD are a group of placental tumours that are extremely sensitive to treatment with chemotherapy resulting in high success rate. This aspect of prognosis warrants a better understanding of barriers in good outcome in such patients.

Objective: To study the treatment outcomes of molar pregnancy referred from community hospital and treated in tertiary care centre

Method: Between 2017 and 2018, 178 cases of molar pregnancy cases were registered for follow-up in Gestational Trophoblastic (142 from our institution and 36 from community hospitals) Diseases clinic at Government Rajaji Hospital, Madurai, Tamil Nadu, India. All the cases enrolled were followed-up with clinical examination, hCG titre and abdominopelvic ultrasonography for suspected malignant mole. Number of repeat curettage and reason for repeat curettage, community as against institutional treatment and their relation to need for chemotherapy were studied.

Results: Out 178 patients, 38 (21 %) required chemotherapy with 20(11 %) developed WHO Low Risk Disease and 18 (10%) developed High Risk disease. Initial institutional management of molar pregnancy was suction evacuation in 142 cases were institutional cases and 36 cases of molar pregnancy had initial management in community hospitals. There was no repeat curettage in institutional cases. 8 out of 18 cases from community centers had a history of repeat evacuation. Two out of 26 (8%) low risk cases had repeat curettage and 6 out of 12 high risk cases had repeat curettage (50%) requiring EMA/CO Schedule. Time to referral for GTD Clinic for institutional was less than 1 week and the same for community cases was 9.11 weeks.

Conclusion: Repeat uterine curettage and evacuation in immediate post evacuation persistent residual intrauterine disease and delayed referral to tertiary care centre from peripheral community hospitals increases the chance of high-risk malignant mole requiring prolonged and intense chemotherapy.

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INTRODUCTION

Gestational Trophoblastic tumours (GTD) are a group of placental tumors associated with pregnancy comprising of premalignant conditions like complete hydatiform mole, partial hydatiform mole and malignant diseases like invasive mole, choriocarcinoma, placental site trophoblastic tumor and epithelioid trophoblastic tumor. These tumors arise from trophoblastic tissue. They are extremely sensitive to treatment with chemotherapy with high success rate.

Due to absence of standard treatment protocol for community obstetricians and delayed referral to tertiary care centers from community hospitals a standard care of treatment is not available to all cases. GTD cases treated in community setup might tend to have poorer outcome as compared to the cases treated in

gynaec oncology institutions. In our setup we follow GTD patients referred from our own institution and community centers, getting unique opportunities to compare outcome of initial management by institutional obstetricians and community obstetricians. In our experience we have noticed differential treatment outcome for GTD cases treated. Our institutional protocol. for follow-up after suction evacuation is to do β hCG within 48 hrs after evacuation, monitor β hCG every week till normal level is reached reached . Once normal B hCG level is reached, then monthly assessment for 6 months is done. Rh negative. patients are given Anti D Immunoglobulin post evacuation. Post evacuation USG monitoring is done to evaluate residual disease, avoid pregnancy until 06 months after β hCG becomes undetectable, condom is advised during declining β hCG levels. OCP/condom after β hCG becomes undetectable, repeat curettage is discouraged. Institutional criteria for diagnosis of malignant Gestational Trophoblastic Diseases are plateauing

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of Serum β hCG level (± 10 percent) for four measurements during a period of 3 weeks or longer –days 1, 7, 14, 21, rise of serum β hCG level >10 percent during three weekly consecutive measurements or longer, during a period of 2 weeks or more –days 1,7,14. Serum β hCG level remains detectable for 6 months or more.

Rajaji Hospital, Madurai, Tamil Nadu, India. A thorough analysis was made with reference to age at presentation, symptomatology, initial management by different obstetrician, pattern of referral, WHO risk scoring and treatment outcome.

Table 1 showing details of 38 patients with malignant mole hence requiring chemotherapy

S.No	Age	Symptoms	Who Risk	Chemo	Cycle No	Referral Source	Time To Referral (Weeks)	No: Of Repeat Evacuation
1	21	Nil	0	M	6	Community	6	0
2	29	Nil	3 IM	M	7	Community	11	1
3	23	Nil	1	M	12	Institution	1	0
4	22	Nil	4	M	8	Community	10	0
5	21	Nil	1	M	8	Institution	1	0
6	29	Nil	3	M	8	Community	8	0
7	30	Nil	0	M	4	Community	8	3*
8	39	Nil	1	M-5, EM -4	9	Institution	1	0
9	20	Nil	0	M	6	Institution	1	0
10	20	Bl PV	7 IM	EM	8	Community	11	1
11	21	Bl PV	5	M-4, Em-4	5	Community	8	0
12	23	Bl PV	7	EM	7	Community	1	0
13	28	Bl PV	7	EM	9	Institution	1	0
14	19	Nil	7	EM	5	Institution	1	0
15	47	Nil	7	EM	10	Institution	1	0
16	28	Wdpv	3	M	4	Institution	1	0
17	21	Nil	7 IM	EM	8	Community	1	0
18	20	Bl PV	3	M	9	Community	12	0
19	42	Bl PV	1	M	4	Community	7	0
20	20	Nil	0	M		Community	8	0
21	29	Nil	3 IM	M	8	Institution	1	1
22	24	Nil	1	M	11	Community	3	0
23	22	Nil	4	M	10	Institution	1	0
24	22	Nil	4 IM	M	8	Community	6	0
25	29	Nil	3	M	9	Institution	1	0
26	31	Nil	0	M	4	Institution	1	0
27	39	Nil	3 IM	M-5, EM -4	9	Institution	1	0
28	19	Nil	0	M	7	Institution	6	0
29	20	Abd Pain	7	EM	8	Institution	1	0
30	22	Bl PV	7	M-4, Em-4	5	Community	1	1
31	23	Amenorrhoea	7 IM	EM	6	Institution	1	1
32	29	Bl PV	7 IM	EM	9	Community	6	1*
33	19	Nil	3	M	9	Institution	1	0
34	48	Abd Pain	7	EM	10	Institution	1	0
35	28	Wdpv	3	M	4	Institution	1	0
36	21	Nil	7 IM	EM	8	Community	17	1
37	19	Nil	3 IM	M	9	Community	18	0
38	43	Bl PV	1	M	4	Institution	16	0

KEY-

Wdpv -white discharge per vagina

Bl PV -bleeding per vagina

M-METHOTREXATE

EM-EMA/CO

IM-Invasive mole

Objective

1. To study the impact of initial management pattern in institutional care and community hospitals.
2. To understand the variables associated with the difference in treatment outcome if any.

METHODS

Being a tertiary care hospital, we tend to get several molar pregnancy cases referred to us at various stages of management from community hospitals and our institution from Department of Obstetrics & Gynaecology. At institutions the initial management of molar pregnancy was suction evacuation and immediate referral to GTD Clinic. During the period between January 2017 and November 2018, 178 cases of molar pregnancy cases were registered for follow-up in Gestational Trophoblastic Diseases clinic at Government

All the cases enrolled were followed-up with clinical examination, β hCG titre and abdominopelvic ultrasonography for suspected malignant mole. Number of repeat curettage and reason for repeat curettage, community as against institutional treatment and their relation to need for chemotherapy were studied. (Table-1)

RESULTS

Our total sample population of GTD patients was 178, of which 142 cases were referred from obstetrics department of our institution and 36 cases were referred from community hospital.

Among those 142 patients referred from institution, 20 (14%) of developed malignant mole and required chemotherapy. 14 (9%) had low risk and 6 (5%) had high risk disease. There were 2 cases for repeat curettage in institutional cases.

Out of 36 community hospital referred cases 18(50%) developed malignant mole and hence required chemotherapy and 6 out of 18 cases from community centers had a history of repeat evacuation. 12(33%) had low risk and 6(17) had high risk disease.

Thus in 178 cases studied, 38 (21 %) required chemotherapy.10 of those 38 patients had invasive mole .26 (14.5%)of those requiring chemotherapy developed WHO Low Risk Disease and 12 (6.5%) of those requiring chemotherapy developed High Risk disease.2 out of those 26 low risk cases had repeat curettage and 6 out of 12 high risk cases had repeat curettage (50%) requiring EMA/CO Schedule.

Time to referral for GTD Clinic for institutional was less than 1 week and the same for community cases was 9.11 weeks

DISCUSSION

Standard protocol for GTD management is essential to ensure adequate care across various obstetricians and oncologist treating the cases. At present there is a wide variation in GTD management in peripheral community hospital and at institutions where oncologists and obstetrician work in tandem. There is variation in counselling, cervical dilatation methods, check curettage after suction evacuation, frequency of HCG follow-up, availability of high quality HCG assay, referral to tertiary centers for GTD Care.

Our study clearly shows that for cases where initial management was done at tertiary care institution, discouraging repeat curettage, early referral to GTD clinic, couples counselling followed by regular follow-up with hCG, the incidence of malignant mole is low. It is noted that the incidence of developing malignant mole in our institutions is 14%. However, analysis of community cases shows 50 % chance developing malignant mole. This may be due to failure to include those cases which never develop malignant change.

In peripheral centers there is tendency to do repeat curettage if immediate post evacuation abdominopelvic sonography shows residual disease, many of which might be invasive mole and invasive moles do not require no repeat evacuation as against blood clots which will be spontaneously expelled. In our institution we routinely do doppler study to check for vascularity, resistivity index if post evacuation residual disease is noted the chance of having invasive mole is high when there is myometrial invasion. Attempting repeat evacuation of malignant mole also can lead to more systemic dissemination and increases the chance of uterine perforation.

Working knowledge of GTDs and an awareness of natural history and standard treatment protocol among community obstetrician can lead to adequate follow-up after first curettage and early referral to tertiary care center whenever persistent malignant mole is suspected

CONCLUSION

Repeat uterine curettage and evacuation in immediate post evacuation persistent residual intrauterine disease which is more likely invasive mole and delay in referral from community hospitals increases the chances of high risk malignant mole requiring intense chemotherapy and this practice is discouraged. Delay in referral to GTD Clinic leads to high WHO Score requiring intense treatment Institutional

management of molar pregnancy should be advocated since community peripheral centers tend to have more repeat evacuation leading to a greater number of high risk malignant mole .

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