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LOW RISK OF RELAPSE WITH DECLINING HCG LEVELS IN WOMEN WITH MOLAR PREGNANCY

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ABSTRACT

OBJECTIVE: *To determine the risk of disease recurrence after HCG declines to undetectable levels following treatment of molar pregnancy.*
PLACE AND DURATION: *This study was conducted at Department of Gynaecology & Obstetrics, Unit-I, Liaquat University Hospital over a period o two years from January 2007 to December 2008.*
STUDY DESIGN: *Retrospective descriptive case series.*
METHODOLOGY: *This study was carried in the Department of Obstetrics and Gynaecology, Unit-I, Liaquat University Hospital, over a period of two years from January 2007 to December 2008. Sixteen hundred & fifty four patients were admitted in the Gynaecology Department, 26 were diagnosed as cases of complete molar pregnancy. Patients with partial mole were excluded from the study.*
The cases of complete molar pregnancy were included in the study. These cases were reviewed retrospectively. Maternal age, gestational age, gravidity and parity were determined for each patient. All the data was collected on a predesigned proforma and was analyzed by used SPSS Version 10.0.
RESUTLS: *Total number of patients admitted in the department during the study period were 1654. Our of them twenty six cases were diagnoses as case of complete molar pregnancy frequency was 1.57%. Age ranged from 16-14 years highest incidence of molar pregnancy was found in women aged 31-40 (38.46%). Parity ranged form zero to grater than five, highest incidence was found in para 2-4 (38.46%). None of the women had relapse of disease after HCG level falls to undetectable levels.*
CONCLUSION: *There is a low risk of replase after achieving undeteetale HCG levels in women with molar pregnancy. Gestational trophoblastic tumors have an excellent prognosis if diagnosed and treated in time and the potential for child bearing can be maintained.*

KEYWORDS: Complete mole, Pregnancy, HCG.

INTRODUCTION:

Molar pregnancy or Hydatiform mole are abnormal conceptions which occur in about 1 in 500-1000 pregnameies[1].

Molar pregnancy comprises two distinct entities, partial and complete moles, which can be distinguished by mean of gross morphological and histopathological examination and according to the chromosomal pattern [2,3,4,5,6].

Complete moles are usually diploid and androgenetic, pathologically demonstrating minimal villi and trophoblastic hyperplasia, while partial moles are usually paternally derived triploid conceptions in which embryonal development occurs in association with trophoblastic hyperplasia [1,7,8]. The conceptus in molar pregnancies is almost always nonviable, following diagnosis, molar tissues is evacuated from uterus and the patients followed up with serum human chronic gunadotropin in estimations[9].

Classically molar pregnancy presented as second trimester vaginal bleeding “Large for Dates” uterus and spontaneous abortion. Such pregnancies can also be complicated by early onset preeclampsia and features of hyperthyroidism [10,11]. Ultrasonography is still used to diagnos most of the these cases because a complete molar pregnancy is characterized by marked swelling of chronic villi, the ultrasonographic finding of a vesicular pattern is strongly suggestive of the diagnosis [12,13]. complete mole is associated with markedly high levels of HCG. While partial moles are present infrequently with substantially elevated HCG levels.

The shift to earlier detection and evacuation of complete moles has made the pathological diagnosis more challenging[14]. Accurate pathological diagnosis can be greatly facilitated through tile use of flow cytometry to determine ploidy and through assessment of bio markers of paternally imprinted and maternally expressed gene products. Because complete moles generally have no maternal chromosomes, paternally imprinted gene products, which arc normally expressed only by maternal chromosomes, should be absent [15,16,17]. After diagnosis is made evacuation of uterus is essential, suction curettage is the optimal method of evacuation regardless of uterine size, in patients who wish to retain reproductive function, because it carries a significantly lower risk of excessive bleeding, infection and retained molar tissue than methods involving induction with oxytocin or prostglandins [18,19]. Because the RhD antigen is present in trophoblast, patients with an Rh negative blood type should receive Rh immune globulin at the time of evacuation of uterus[2]. Patients who have completed their families or do not have a desire of child bearing may undergo hysterectomy. Although hysterectomy prevent the development of local invasion, it does not eliminate metastatic disease. Therefore careful monitoring of HCG level is Still required to ensure that persistent neoplasia dose not develop[2].

Most patients with molar pregnancy who subsequently conceive will have a normal pregnancy, but there is increased risk of another molar pregnancy and still birth[20]. Subsequent pregnancies will be monitored by early ultrasonography to confirmed normal development. In addition levels of HCG should be estimated 6 weeks after completion of a subsequent pregnancy to rule out occult trophoblastic neoplasia. After treatment, follow up is essential in all cases of molar pregnancies.

Tile American college of Obstetricians and Gynaecologists has recommended that after evacuation of mole, serum HCG level should be monitored every I-2 weeks in all patients while the level are elevated and then at monthly intervals for an additional 6 months, till tile levels become undetectable (<5 miu per millilitor)[21]. Patients should be instructed to use reliable contraception during the entire interval of HCG monitoring.

Data indicates that the use of oral contraceptive is safe during the period[2].

METHODOLOGY:

This study was carried in the Department of Obstetrics and Gynaecology, Unit-I, Liaquat University Hospital, over a period of' two years from January 2007 to December 2008.

Sixteen hundred & fifty four patients wore admitted in the Gynaecology Department, 26 were diagnosed as cases of complete molar pregnancy. Patients with partial mole were excluded from the study.

The cases of complete molar pregnancy were included in the study. These cases were reviewed retrospectively. Maternal age, gestational age, gravidity and parity were determined for each patient. Patients were evaluated for potential medical complications such as anemia, toxemia or hyperthyroidism. Complete physical examination was performed patients were submitted for investigations. Investigation included blood group, total blood count, haematocrit, serum Beta HCG, thyroid, liver and renal function tests and X-ray Chest. Ultrasound Examination of abdomen and pelvis was performed in all cases. All the Data collected was analyzed by using SPSS Version 10.0. Patients were managed in collaboration with oncologist. Suction evacuation was considered as optimal method of uterine evacuation. Chemotherapy was considered in high risk patients, were followed up after treatment with serial Beta HCG levels.

RESULTS:

Total number of patients admitted in the department during the study period were 1654.

Out of them twenty six cases were diagnoses as cases of complete molar pregnancy frequency was 1.57%.

Age ranged from 16-14 years highest incidence of molar pregnancy was found in women aged 31-40 (38.46%) followed in order of frequency by 21-30 years (34-61%) and 16-20 years (26.92%).

Parity ranged from zero to greater than five, highest incidence was found in para 2-4 (38.46%).

TABLE – I

DISTRIBUTION ACCORDING TO AGE

YEARS	AGE	PERCENTAGE
6-20	7	26.92%
21-30	9	34.61%
31-40	10	38.46%

TABLE – II

DISTRIBUTION ACCORDING TO PARTY

YEARS	AGE	PERCENTAGE
PG	7	26.92%
2-4	10	38.46%
5 or more then	9	34.61%

Most of the patients presented with vaginal bleeding 88.46%. Pretreatment serum beta HCG was >200,000 in 53.84 % of patients and was < 200,000 in 38.46% of patients and was upto 200,000 in 7.6% of patients. Suction evacuation was performed as a method of choice for evacuation of uterus ill all patients. 73.07% of patients had spontaneous regression of HCG levels after evacuation 19.2% of patients presented with persistent high levels. They were managed in collaboration with oncologist. They had regression of HCG level after single cycle chemotherapy with methotrexate. Hystretomy was performed in two patients with completed families and high risk factors.

DISCUSSION:

The incidence of Hydatidiformmole is difficult to assess accurately but appears to be gradually increasin, As gestational trophoblastic disease follows all kind of pregnancy, the denominator for the incidence should ideally include all live births, still births, abortions and ectopic pregnancies[22]. The frequency of complete mole in our study was 1.57% it was comparable of the study conduced by cortex23 where it was 0.7%.

Maternal age appears to be the most consistent risk factor associated with molar pregnancy. Extremes of reproductive life associated with an increased risk.

In this study highest incidence of molar pregnancy was found in age group 31-40 followed by age group 21-30 years, similar observation was found in the study conducted by Stone M24 in which there was in excess of molar pregnancy arising in women our 34 years of age.

In this study frequency of molar pregnancy vas found highest in para 2-4 (38.46%) followed in order of frequency by para 5, (34.61%) and para zero (26.92%)

respectively.

With availability of tests for the determination of HCG and the use of early ultrasonographic examination the diagnosis was made earlier in the first trimester the mean gestational age was 11.5 weeks. The similar observation was found in the study done by Soto-wright[2,25]. Where the mean gestational age at diagnosis was 11.8 weeks. Vaginal bleeding was the presenting complaint in 95% of cases in tllis study. This was similar to the study by cortes[23] but was in contrast to Soto wright study[25]. Serum beta HCG level are essential both in the diagnosis and in the follow up of molar pregnancy. There are high rate of complete responses and long term survivors, because of the excellent chemosensitivity of these tumours.

Suction curettage was performed as the method of evacuation regardless of uterine size.

Serial HCG level were monitored until become undetectable. 73.07% had spontaneous regression of HCG levels after suction evacuation. 19.2% had persistent high levels of HCG after evacuation there were managed in collaboration with oncologist. Single cycle chemotherapy with methotrexate resulted in normalization of HCG levels. This was compared with other studies, this observation was in contrast to the study done by Pisal N27 where 5.1% women needed chemotherapy but it was similar to the study carried of by Kerkmeijer L, where 13.3% patients had persistent high level and chemotherapy was given to these patients[27].

In 7.6% of patients with parity > 8 and HCG level >100,000 miu/1 and a uterine size larger than appropriate for gestational age and theca luteun cysts larger then 6 cm, Hystrectomy was performed. These patients also had normalization of HCG levels on follow up.

None of the patients after normalization of HCG levels had recurrence of Molar pregnancy. Similar results was found in the study done by Wolfberg[28].

CONCLUSION:

There is a low risk of replase after achieving undeteetale HCG levels in women with molar pregnancy. Gestational trophoblastic tumors have an excellent prognosis if diagnosed and treated in time and the potential for child bearing can be maintained.

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