A Rare case report of triplet pregnancy with complete hydatidiform mole

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***Abstract*- Triplet pregnancy with complete mole with coexisting alive twin fetuses is a rare condition. This paper aims to present a comprehensive case report involving triplet pregnancy with complete hydatidiform mole, discussing the clinical presentation, diagnostic evaluation, management strategies, follow-up and outcome.**

A retrospective analysis was conducted on a 26 year-old primigravida presented with twin gestation diagnosed with imminent eclampsia. Ultrasound imaging had not diagnosed associated molar pregnancy, which was later confirmed by histopathology to be a complete hydatidiform mole after delivery. Then patient medical records, imaging findings and management approaches were reviewed to assess the clinical course and outcome. Postnatally, close surveillance for persistent trophoblastic disease was done found to have good prognosis. Manageing a triplet pregnancy complicated by hydatidiform mole requires a multidisciplinary approach involving the obstetrician , maternal and fetal medicine specialist ,pathologist and oncologist . Timely diagnosis , comprehensive evaluation and individualized management strategies are crucial to optimize outcome for both mother and surviving fetuses. This case highlights the importance of early recognition of placental abnormalities, close monitoring of maternal and fetal well-being for effective management and follow-up of cases. Further research and collaboration are needed to understand rare condition and refine therapeutic approaches.

***Key words*- triplet pregnancy, complete hydatidiform mole, pre -eclampsia, gestational trophoblastic disease.**

I. INTRODUCTION

Hydatidiform mole can be classified both on the basis of pathology and genetic studies , as complete and partial hydatidiform mole. Complete mole is characterized by both cystic villi and trophoblastic proliferation. In complete molar pregnancy, evidence of fetal development is extremely rare. Incidence of triplet pregnancy with alive twin fetuses with complete mole is unknown due to rarity of cases. Molar pregnancy usually landed up with complications like spontaneous abortion, intra uterine fetal demise, pre-eclampsia, pre term labor and hyperthyroidism. Incidence of multiple pregnancy with complete hydatidiform mole is a rare condition reported in 1:20000 to 1:100000 cases.

II. CASE REPORT:

A 26 year-old un-booked primigravida with twin pregnancy with 32 weeks of gestation presented to our casualty with grade 3 gestational edema and decreased fetal movement. She conceived spontaneously. She had a history of admission at private nursing home in view of hyperemesis gravidarum at 9 weeks of gestation and history of admission at around 12 weeks in private hospital in view of threatened abortion. Patient is a known case of hypothyroidism and on thyroxine 100 mcg and her recent thyroid function report was under control. Antenatal scans were taken and revealed to be a twin gestation. No routine antenatal scans had revealed information regarding molar pregnancy.

Patient was admitted at eclampsia room and all blood investigations were done , blood pressure monitoring was done. All blood pressure recordings were high and patient had complaints of headache, which was persistent in nature. patient was landed up in imminent eclampsia and started on antihypertensives, In spite of which blood pressure was not controlled and prophylactic magnesium sulphate was given .Patient was induced with foleys and prostaglandinE2 gel.

Patient progressed into labor and emergency caesarean section was done in view of fetal distress.

INTRAOP:

Delivered twin babies, TWIN 1 – alive female baby of birth weight: 1.64kg with AP 7/10,8/10,

TWIN 2- alive female baby of birth weight:1.55kg with AP 7/10.8/10 Delivered. Both the babies were apparently normal without deformities. Along with delivery of dichorionic diamniotic placenta, a chunk of vesicular tissue in a separate sac was seen and delivered. Placenta with molar tissue is subjected for histopathological examination.

Macroscopically- the placenta was dichorionic and diamniotic with distinct groove with two separate cords.

Tissue with molar changes showing fluid filled vesicles with grape like appearance, which is covered by a membrane.

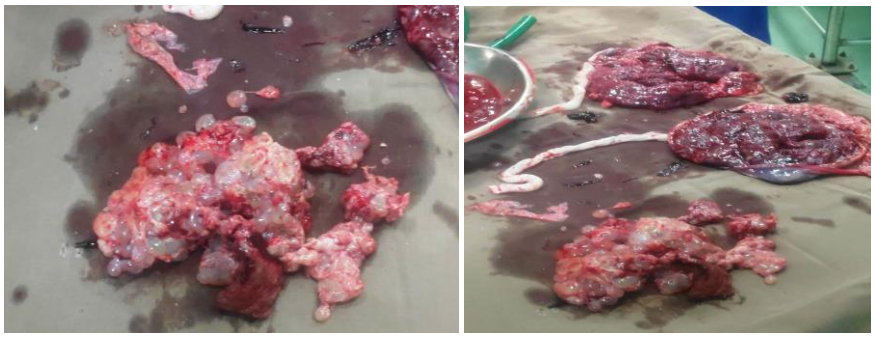

Figure: 1 Showing the Dichorionic Placenta with Complete Mole.

MICROSCOPICALLY, multiple huge dilated villi with circumferential trophoblastic proliferation of trophoblast cells which is suggestive of complete mole

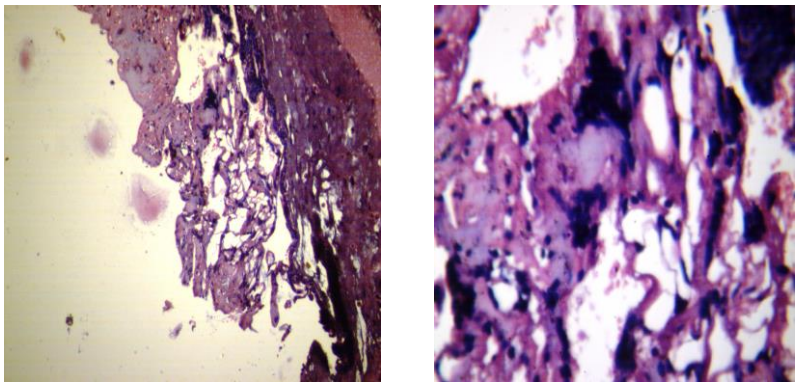

Figure: 2 Vesicles of Varying Sizes with Circumferential Trophoblastic Cell Proliferation.

We confirmed our case to be TRIPLET PREGNANCY after Histopathology report, showing molar pregnancy with no connection to other two placenta and babies.

Her postpartum period was uneventful and both babies survived well.

Post operatively, Patient investigated with beta HCG following evacuation:

DAY 1 – 50 mIU/ml: DAY 7- 10.3 Miu/ml: DAY14 – 5.6mIU /ml : DAY 31- 1mIU/ml and 2 nd MONTH - <0.1Miu/ml still patient is under follow up.

Karyotyping of both babies were done by pediatric team found to be 46XX for both babies postoperatively.

III. DISCUSSION:

In our case, patient presented to us with a twin gestation with complications of pre-eclampsia and diagnosed retrospectively, to have molar pregnancy after caesarian section. No antenatal scans were diagnosed this abnormality, the diagnosiswas missed in routine scans. Retrospective analysis of scan report images, made us to identify the abnormality in a nearby placental region.

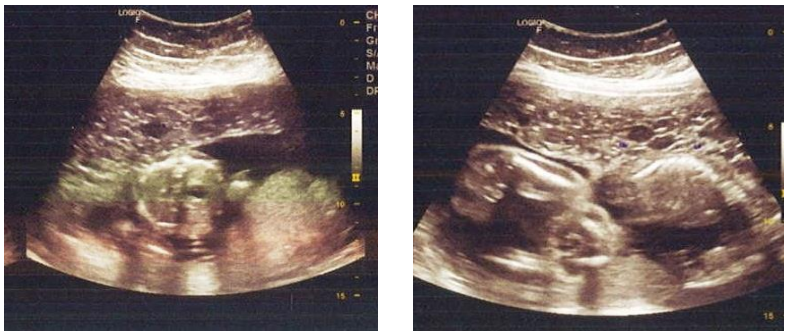

Figure: 3 Picture Showing Vesicles in Scan Report.

This patient is a known case of hypothyroidism, in contrary with other molar pregnancy, hyperthyroidism association is common.

First trimester diagnosis is possible but appears to be more challenging, it is misdiagnosed as subchorionic hematoma, early miscarriage, placental mesenchymal dysplasia, placental chorio-angioma[1]. Complete hydatidiform mole is a benign trophoblastic disorder occurs due to fertilization of empty ovum with haploid sperm, which duplicates and presented as a molar pregnancy. Most reported cases were found to be conceived after ovulation induction, invitro fertilization, ICSI, IUI methods previously, only 3 cases were reported to be spontaneous conception as of our knowledge. These pregnancies present as a management dilemma for both parents and physician, as to whether to continue or terminate pregnancy; especially to the couples who are under infertility treatment for long time. Previous reported cases are complicated with risk of spontaneous abortion, preterm labor, vaginal bleeding, intra uterine fetal demise, hyperthyroidism ,pre-eclampsia, persistent Gestational trophoblastic neoplasia.

In this case, pregnancy is complicated with pre-eclampsia, which is thought to be due to the twin gestation later incidentally associated with molar pregnancy. The is no evidence of persistent gestational trophoblastic disease in this patient .follow-up beta HCG values are in falling trend and no other symptoms are suggestive of persistent trophoblastic disease. The criteria for a termination of pregnancy include thyrotoxicosis ,severe pre-eclampsia, refractory vaginal bleeding, intractable hyperemesis gravidarum, trophoblastic embolization and parents not willing to continue pregnancy[2].A termination of pregnancy does not change the chances of development of GTN.[1].The rate of persistent GTN ranges from 19% to 31% in twins with one mole to 46% in multiple gestation with molar pregnancy.

CONCLUSION:

The Best challenge here is diagnosis. In absence of any severe complication, patients can opt for expectant management, close prenatal monitoring for potential complications and serial ultrasound examination should be carried out. serial beta HCG monitoring should be done both antenatally and postnatally. Any progression to gestational trophoblastic neoplasia should be identified earlier. Recently, early diagnosis by ultra sound and karyotyping by amniocentesis, DNA finger printing analysis [3]should be made if diagnosed antenatally and decide regarding the continuation of pregnancy. This case makes us understand not every pregnancy with complete mole results in poor prognosis. More multicentric trials and randomized control trials should be done for these cases to know the course .Early diagnosis and proper antenatal surveillance will help to manage complications early. this case reported for its rarity and favorable outcomes.

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