

Occurrence of offensive mole after suction evacuation needing Chemotherapy, Invasive mole is malignant gestational disease that can occur during pregnancy

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Abstract:

Objective: Invasive mole is malignant gestational disease that can occur during pregnancy. Main aim of this study is to check the incidence of invasive mole after suction evacuation procedure.

Materials & Methods: This study was done from July 2020 to December 2021 for period of 1.5 years. This main purpose of this study is to find the incidence of invasive mole which needs chemotherapy after suction and evacuation. For this purpose, 200 individuals with either partial or complete mole were taken, whom complete suction and evacuation was done. Patient was asked for regular follow up after every 3 weeks up to 1 year and incidence of any kind of invasive mole got observed.

Results: Total 200 females having molar pregnancy participated in this study. Whom complete suction and evacuation was done. Patients kept for follow up after every 3 weeks and about after 6 months 4 female presented with heavy bleeding after 2 month of Amenorrhea. Beta hcg was raised. Diagnosis of invasive mole was done as the mole was penetrating the uterus. Incidence of invasive mole was 2%. Chemotherapy was done in these patients.

Conclusion: Individuals with molar pregnancy should be monitored consistently to ensure prompt identification of persistent gestational trophoblastic disease and appropriate treatment, as failure to track patients could result in complications

Keywords: invasive mole, suction evacuation, Curettage, Gestational trophoblastic disease

Introduction: An invasive mole, also known as an invasive hydatidiform mole or chorioadenoma destruens, is a rare and potentially malignant gestational trophoblastic disease that occurs during pregnancy (1,2). It is considered a form of gestational trophoblastic neoplasia (GTN), which encompasses a group of conditions characterized by abnormal growth of cells in the uterus after fertilization (3,4).

Invasive moles develop from abnormal fertilization events, where an abnormal fertilized egg implants itself in the uterus and begins to grow (4). Unlike a complete or partial molar pregnancy, where the abnormal cells remain confined to the uterus, an invasive mole penetrates the uterine wall and can potentially invade nearby tissues and blood vessels(5,6).

The distinguishing feature of an invasive mole is the ability of its cells to infiltrate the muscular layer of

the uterus and, in some cases, spread to other organs such as the lungs, liver, or brain (7). This invasive behavior makes it potentially malignant, meaning it can progress to a more aggressive form of GTN called choriocarcinoma (8,9).

Symptoms of an invasive mole can include persistent vaginal bleeding, enlarged uterus for gestational age, severe abdominal pain, and passage of grape-like clusters of tissue through the vagina (10,11). The condition is typically diagnosed through a combination of clinical examination, ultrasound imaging, and analysis of tissue samples obtained through dilation and curettage (D&C) (12)

Suction evacuation, also known as suction curettage or vacuum aspiration, is a common procedure used to remove the molar tissue from the uterus (13).

Suction evacuation is often the preferred treatment for invasive mole. The procedure involves the use of a suction device to gently remove the abnormal tissue from the uterus (14).

Main aim of this study is to check the incidence of invasive mole after suction evacuation procedure.

Materials & Methods: This study was done from July 2020 to December 2021 for period of 1.5 years. Approval was got from Ethical review board of hospital.

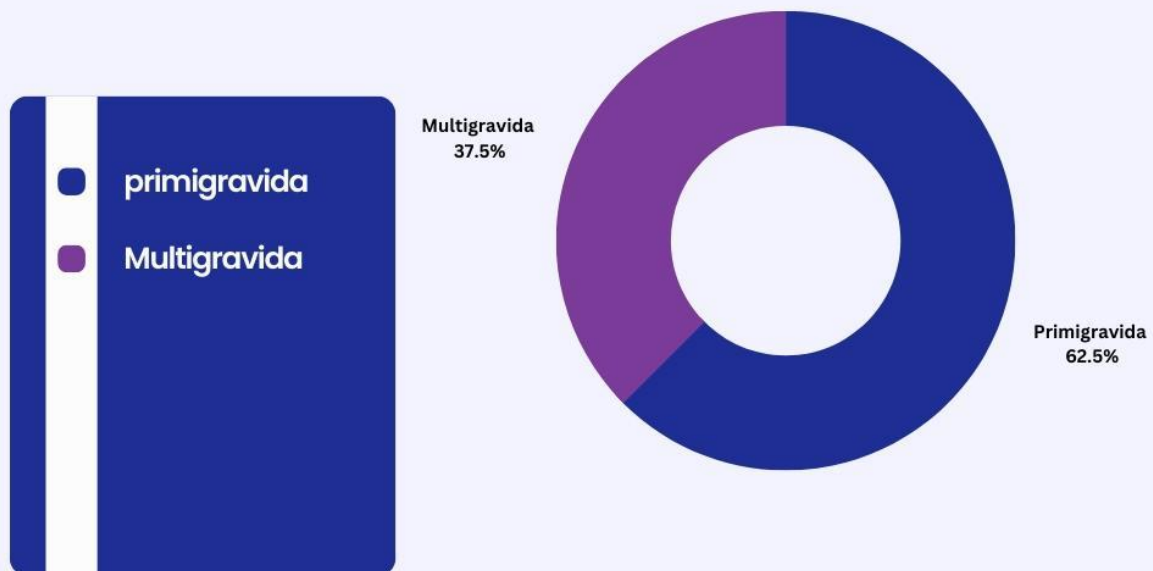
Proper informed consent was taken from all the participants. This main purpose of this study is to find the incidence of invasive mole which needs chemotherapy after suction and evacuation. For this purpose 200 individuals with either partial or complete mole were taken, whom complete suction and evacuation was done. For this, Patients were put in Lithotomy position. Their cervix got dilated, a cannula was put inside cervix which got attached with a suction machine. Complete removal of tissues got Done. Curettage was done to help remove any remaining tissue or to ensure the uterine lining is completely smooth. Cervix got examined for removed tissue to ensure that it is complete and that no further intervention is necessary. Patient was asked for regular follow up after every 3 weeks up to 1 year and incidence of any kind of invasive mole got observed.

Results: Total 200 females having molar pregnancy participated in this study. Whom complete suction and evacuation was done. Age of participants was in range of 22 to 35 yrs. (mean=28 years). Out of these 200, About 125 (62.5%) patients were primigravida, while remaining 75(37.5%) were multigravida.

Table 1: Basic details of participants in this study (n=200)

Sr.No	Parameter	Number	Percentage
1.	Age	22-35 yrs.	100%
2.	Primigravida	125	62.5%
3.	Multigravida	75	37.5%

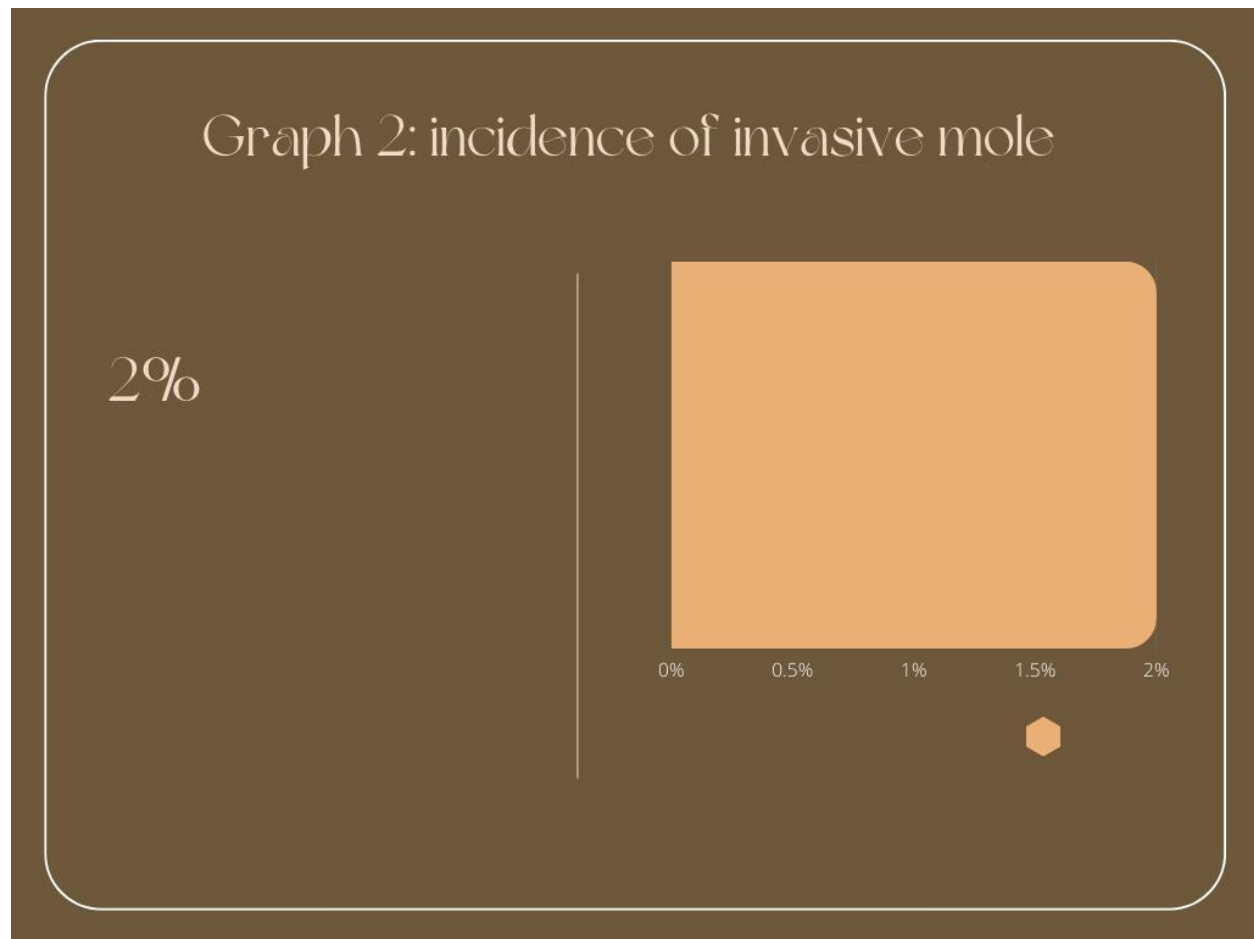
**Graph 1: showing
parity in patients**



After suction and evacuation, patients kept for follow up after every 3 weeks and about after 6 month 4 female presented with heavy bleeding after 2 month of Amenorrhea. Beta hcg was raised in these females. Again suction evacuation was done and material was sent for histopathology.

Table 2: incidence of invasive mole (n=200)

Sr.No	Outcome	Number	Percentage
1.	Incidence of invasive mole	4	2%



Diagnosis of invasive mole was done as the mole was penetrating the uterus. Four administrations of

injection Methotrexate followed by folinic acid were given, but the β hcg levels did not decrease significantly. Upon examination of the tissue sample, there was no indication of invasive mole; however, based on the MRI results, second-line chemotherapy (EMACO) was initiated. The patient has undergone five cycles of the EMACO regimen, with regular monitoring of the β hcg levels, which have shown a decreasing trend and have now reached 5.90 mIU/ml.

Discussion: Gestational trophoblastic disease (GTD) is a range Of anomalous expansion and proliferation of trophoblasts that persist even after the completion of pregnancy (15). It includes molar pregnancy, invasive mole, choriocarcinoma, and tumor of the placental site. Penetrating mole (Choreoadenoma destruens) accounts for approximately 5-8% of all GTD (16,17). It possesses invasive and destructive capabilities. Suction evacuation and scraping, ideally conducted with the assistance of ultrasonography, is the favored approach for removing a molar pregnancy regardless of the size of the uterus when preservation of fertility is the goal (18). It is advised to utilize a suction tube measuring 12–14 mm in diameter, and initiating an intravenous infusion of oxytocin at the beginning of aspiration scraping, which can be continued for a few hours after the procedure to improve uterine contractions and reduce hemorrhage(19). Total 200 females having molar pregnancy participated in this study. Whom complete suction and evacuation was done. Age of participants was in range of 22 to 35 yrs. (mean=28 years). Out of these 200, About 125 (62.5%) patients were primigravida, while remaining 75(37.5%) were multigravida. After suction and evacuation, patients kept for follow up after every 3 weeks and about after 6 month 4 female presented with heavy bleeding after 2 month of Amenorrhea. Beta hcg was raised in these females. Again suction evacuation was done and material was sent for histopathology. Diagnosis of invasive mole was done as the mole was penetrating the uterus. Four administrations of injection Methotrexate followed by folinic acid were given, but the β hcg levels did not decrease significantly. Upon examination of the tissue sample, there was no indication of invasive mole; however, based on the MRI results, second-line chemotherapy (EMACO) was initiated. The patient has undergone five cycles of the EMACO regimen, with regular monitoring of the β hcg levels, which have shown a decreasing trend and have now reached 5.90 mIU/ml.

Hysterectomy is a substitute for suction curettage if childbearing is finished (20,21).. Besides removing the molar pregnancy, salpingectomy offers permanent sterilization and reduces the necessity for future chemotherapy by eliminating the possibility of local myometrial invasion as a source of persistent illness (22). Medicinal induction of labor and cesarean section are not advised for molar evacuation as these approaches raise maternal morbidity and the occurrence of postmolar GTN necessitating chemotherapy (23).

Chemotherapy should be replaced with the alternative solitary medicament If there has been a positive response to the initial medicament but the hCG Levels off or increases during therapy, or if toxicity prevents a sufficient dose or frequency of treatment (24,25).

Incidence of invasive mole is although rare but it tends to be aggressive (26,27). It usually needs chemotherapy as we have also done in our study.

Conclusion: Individuals with molar pregnancy should be monitored consistently to ensure prompt identification of persistent gestational trophoblastic disease and appropriate treatment, as failure to track patients could result in complications

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