Twin Gestation Consisting of Hydatidiform Mole and a Live Fetus: A Case Report

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Abstract
Twin gestation consisting of hydatidiform mole and a live fetus is a rare entity. A 22-year-old gravida 2 para 1+0, 1 alive patient presented with 14 weeks amenorrhoea and vaginal bleeding. Ultrasonography revealed hydatidiform mole and a viable fetus. She had suction curettage at 16 weeks gestational age because of heavy vaginal bleeding. Histology confirmed benign hydatidiform mole. Urinary HCG level declined progressively and was negative by 4 weeks post-evacuation. Eight months after, she was 20 weeks gravid. She had uneventful pregnancy, labour and delivery of a baby boy. The baby (now a year old) and the mother remain well.

Keywords: Hydatidiform Mole, Single Fetus, Twin Gestation, Ultrasonography

Introduction
Hydatidiform mole (HM) with a coexistent of live fetus is a rare occurrence. The incidence is about 1 in 10 000 to 1 in 100 000 pregnancies. Molar pregnancies result from the abnormal contribution of genetic material from the egg and sperm. Traditionally, there are two possible conditions: a partial mole with an abnormal triploid fetus and a complete mole combined with a normal fetus and placenta. Presentations commonly include first or second trimester vaginal bleeding, rapid uterine enlargement, excessive uterine size for dates, hyperemesis gravidarum or preclampsia before 24 weeks.

Ultrasonography is a vital diagnostic tool in this condition and has a role to guide its evacuation. Recently, MRI has been used for prenatal diagnosis of molar pregnancy. Other important diagnostic tools include urinary and serum human chorionic gonadotrophin (hCG) titre, DNA typing and histopathology.

Nigeria, with approximately 1 in every 22-35 deliveries as twins, has one of the highest twinning rate in the world. However, as far as we are aware only two cases of molar gestation coexisting with a live foetus have been reported in Nigeria, with both from the southeastern zone, implying also the rarity of this condition in Nigeria.

We present a case of twin gestation consisting of an HM and a live fetus in a Nigerian woman diagnosed at 12 weeks gestation during routine ultrasonography at the fetal monitoring unit of University of Ilorin Teaching Hospital, Nigeria. Pregnancy had to be terminated abruptly at 16 weeks gestation because of uncontrollable antepartum haemorrhage.

Case Report
A 22 yr old, Gravida 2 para 1 + 0 presented with intermittent spotting of blood of one-week duration. She has been amenorrhoeic for 14 weeks prior to presentation. Physical examination revealed fundal height of 18 weeks duration in a normotensive woman. Ultrasound examination revealed two sacs (fig.1). The leading sac in the lower uterine segment showed mixed echogenic area with intervening cysts giving a 'snow storm' appearance which is characteristic of molar pregnancy. The second sac contained a live fetus of 14 weeks gestational age with...
regular cardiac activity, adequate amniotic fluid volume and anteriorly situated placenta in the body of the uterus. A thin membrane separated these sacs suggesting diamniotic twins (Figures 1a and 1b). Laboratory work up shows raised serial urinary human chorionic gonadotropin (hCG) titre of about 2, 000, 000 IU/L. full blood count and LFT were normal. Pack cell volume (PCV) was 25%.

A week later, patient was admitted due to worsened intermittent vaginal bleeding. PCV had fallen to 21%. Repeated US still confirmed a live fetus. Pregnancy was therapeutically terminated at 16 weeks of gestation via suction evacuation because of uncontrollable antepartum haemorrhage. Histological examination showed benign hydatidiform mole. Patient remained stable and serial urine hCG level progressively diminished overtime and became negative from 4 weeks of surgery. Serum hCG level progressively diminished from few mm to 30mm which are due to the hydrophilic villi seen within the molar tissue given a snowstorm appearance.  This should be differentiated from a missed abortion with its degenerated gestational sac, especially during the early pregnancy, or a partially necrotic leiomyoma which can produce a similar appearance.  

Ultrasound also allows the number of fetuses, placentae and site of placentation to be determined. Most importantly it helps to determine presence of foetal anomalies and viability. In addition to being the best method for the diagnosis of HM, ultrasound is also used in the surgical treatment of the mole by suction evacuation under ultrasonic guidance.  

Recently MRI is being used in some centers . However, its high cost and relative unavailability may limit it use in the developing world.  

In this patient, ultrasound revealed a normally appearing foetus with good cardiac activity and a normal anteriorly located placental. The second sac devoid of a fetus, consists of placenta tissues composed of complex cysts with intervening echogenic septa suggestive of HM. HM co-existing with live fetus or fetuses generally presents a management dilemma between clinicians and parent on whether to continue or terminate pregnancy immediately. At present there are limited data to guide the antenatal management of twin pregnancy consisting of HM and a coexisting foetus . However, many clinicians have advocated that Patients who desire to continue pregnancy after such a diagnosis must be cautioned about the potential for severe medical complication like heavy vaginal bleeding and pre-eclampsia which usually warrants termination or pregnancy.  In this case presentation pregnancy was terminated on account of uncontrollable heavy vaginal bleeding and moderate anemia. More so patients should be advised of the high risk for developing gestational trophoblastic neoplasia.  

The treatment of this condition is evacuation of the uterus, and vacuum aspiration is considered the method of choice, as opposed to medical induction using oxytocic drug, which is thought to carry an increased risk of persistent trophoblastic disease.  

A procedure of the evacuation of complete HM by vacuum suction and continuous ultrasonic monitoring has also been advocated. Because of the possibility of progression to malignant trophoblastic disease, careful and prolonged follow-up of such women is required. In this case presentation, Urinary HCG level was undetectable 4 weeks after evacuation. Eight months after evacuation, she was 20 weeks gravid. She had uneventful pregnancy, labour and delivery of a baby boy. The baby (now a year old) and the mother remain well.

An early and correct diagnosis is imperative to plan subsequent management of such patients. Ultrasound plays the most important role in the diagnosis of this condition. The typical ultrasonographic findings of a complete molar pregnancy consist of an enlarged uterus, echogenic regions representing molar tissue, and uniformly distributed cystic spaces ranging in size from few mm to 30mm which are due to the hydrophilic villi seen within the molar tissue given a snowstorm appearance. This should be differentiated from a missed abortion with its degenerated gestational sac, especially during the early pregnancy, or a partially necrotic leiomyoma which can produce a similar appearance.
References


