

THE ROLE OF ULTRASOUND IN THE DIAGNOSIS OF PARTIAL HYDATIDIFORM MOLE IN A RURAL AREA: A CASE REPORT

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Abstract

Partial hydatidiform mole is a form of Gestational Trophoblastic Disease (GTD) that is characterized by the presence of fetus or fetal tissue co-existing with an intrauterine cystic mass. It is a rare presentation with a reported incidence of 1:700 births. Ultrasound scan is an excellent imaging modality used in the diagnosis of this condition. We are reporting 30 years old G6P5+0 A5 who was referred to our facility from a rural area for ultrasound scan on account of painless vaginal bleeding 3/7, lower abdominal pain, head ache, nausea and vomiting. There was a history of 4 months of amenorrhea. No history of instrumentation or trauma. A presumptive diagnosis of threatening miscarriage was entertained by the referring health personnel. Abdominopelvic ultrasound done revealed a gravid uterus containing a live fetus at about 12 weeks + 5 days GA with coexisting hypoechoic mass containing multiple cystic areas within it given the so-called “snow storm” or “bunch of grapes” appearance. The placenta was noted on the anterior uterine body. Diagnosis of partial molar gestation with a live fetus was made. The patient lost the pregnancy one day after the scan at the referring PHC facility before reaching a tertiary hospital.

Keywords: Partial hydatidiform mole, gestational trophoblastic disease, amenorrhea.

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Introduction

Partial hydatidiform mole is a form of Gestational Trophoblastic Disease (GTD) that is characterized by the presence of fetus or fetal tissue co-existing with an intrauterine cystic mass.¹ It is a rare presentation with a reported incidence of 1:700 births.¹ Other studies reported incidence of 0.11%³ and 0.005 to 0.01%⁴ of all pregnancies. Ultrasound scan is an excellent imaging modality used in the diagnosis of this condition⁵ because it is safe, non-invasive, readily available, cheap and does not use ionizing radiation.^{6,7,8,9} We are reporting a rare case of partial hydatidiform mole diagnosed using ultrasound in a private facility.

Case Report

H.I, 30 years old G6P5+0 A5 who was referred to our facility from a PHC in Gwadabawa LG Sokoto state for ultrasound scan on account of painless vaginal bleeding 3/7, lower abdominal pain, head ache, nausea

and vomiting. There was history of 4 months amenorrhea. No history of instrumentation or trauma. A presumptive diagnosis of threatening miscarriage was entertained by the referring health personnel. PCV done was 31%. She was placed on hematinics and antibiotics.

Abdominopelvic ultrasound done revealed a gravid uterus containing a live fetus at about 12 weeks + 5 days GA. Figure 1a. A coexisting hypoechoic mass lesion measuring about 81x61.4x65.4mm with multiple cystic areas within it given the so called “snow storm” or “bunch of grapes” appearance was demonstrated in the lower anterior uterine wall with the placenta noted on the anterior uterine body. Figure 1b. Diagnosis of partial molar gestation with a live fetus was done.

The patient lost the pregnancy one day after the scan at the referring PHC facility before reaching a tertiary hospital.

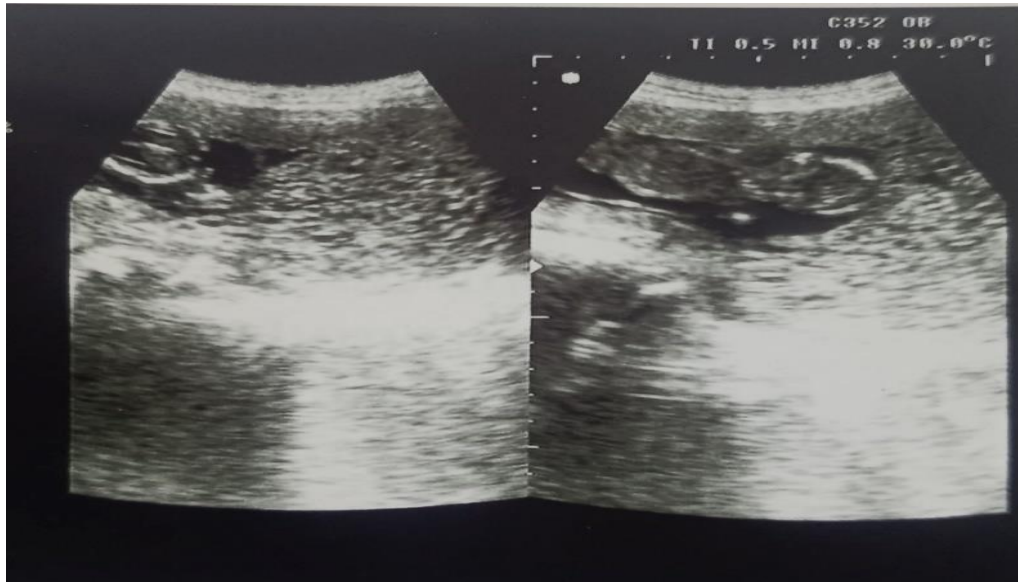


Figure 1a: Longitudinal(right) and transverse(left) views of the uterus showing a viable fetus coexisting with a hydatidiform mole



Figure 1b: Longitudinal(right) and transverse(left) views of the uterus showing the hydatidiform mole

Discussion

Partial hydatidiform mole occur when a normal ovum is fertilized by one or two sperm cells.¹ It is a rare case and mostly the fetus is non-viable. However rare cases are

reported with a viable fetus as seen in the index case.^{1,4} The patient is 31 years multi gravida and the fetus is in first trimester which conform to the literature.^{10,11}

The reported clinical features include painless bleeding per vaginum in the 4th to 5th month of pregnancy, hyper emesis and uterus larger than the gestational age.^{1,4,12} These findings are similar to the presentation of the case under review. Imaging especially ultrasound scan plays vital role in the diagnosis of partial mole especially in rural areas where more sophisticated test like serum β -HCG (human chorionic gonadotrophin) are not available.^{1,13} The case under review was diagnosed using trans abdominal ultrasound scan in a private facility there by conforming to the literature.

The predominant findings on imaging are those of an enlarged uterus with mass containing numerous sonolucencies having appearance like bunch of grapes and coexisting with embryonic or fetal pole

REFERENCES

- 1- Nzeh DA. The complicated early and advanced pregnancy. In: Essentials of abdominal and pelvic ultrasound. 1st ed, Ilorin Nigeria: Mighty Demolex; 2021. pp. 159-161
- 2- Radswiki T, Yu Y, Ashraf A, et al. Molar pregnancy. Reference article, Radiopaedia.org (Accessed on 05 May 2025)
<https://doi.org/10.53347/rID-13159>
- 3- Audu BM, Takai IU, Chama CM, Bukar M, Kyari O. Hydatidiform mole as seen in a university teaching

commonly dead or rarely viable.¹ The case under review was that of a viable fetal pole that appear small for GA coexisting with a mass containing multiple cystic areas within it there by conforming to the literature (Figure 1a and 1b). The patient was referred to a tertiary centre for expertise management but she lost the pregnancy and expelled the mass spontaneously at the PHC before getting to the tertiary centre.

Conclusion

Ultrasound scan plays important role in the evaluation of women that present with first trimester PV bleeding especially in rural areas. Early detection of the cause will help in instituting appropriate treatment there by reducing the morbidity, mortality or disability that could result.

- hospital: a 10-year review. J Obstet Gynaecol. 2009;29(4):322–5. doi: 10.1080/01443610902807345. [[DOI](#)] [[PubMed](#)] [[Google Scholar](#)]
- 4- De Franciscis P, Schiattarella A, Labriola D, Tammara C, Messalli EM, La Mantia E, Montella M, Torella M. A partial molar pregnancy associated with a fetus with intrauterine growth restriction delivered at 31 weeks: a case report. J Med Case Rep. 2019 Jul 4;13(1):204. doi: 10.1186/s13256-

- 019-2150-4. PMID: 31269962; PMCID: PMC6610795.
- 5- Memtsa M, Johns J, Jurkovic D, Ross JA, Sebire NJ, Jauniaux E. Diagnosis and outcome of hydatidiform moles in missed-miscarriage: a cohort-study, systematic review and meta-analysis. *Eur J Obstet Gynecol Reprod Biol.* 2020 Oct;253:206-212. doi: 10.1016/j.ejogrb.2020.07.030. Epub 2020 Aug 1. PMID: 32877774.
 - 6- Patre V, Aryan AK, Sahu P, V. P. Ultrasonographic Evaluation of Fetal Humerus Length for Assessment of Gestational Age and Its Comparison with Other Conventional Parameters. *Int J Sci Stud.* 2015;3,(7):58-64.
 - 7- Nages R, Seetha Pramila VV, Shukla AK. Ultrasonographic estimation of foetal gestational age by humerus length and its comparison with femur length. *J.evid. based med healthc.* 2016;3:4040-4044.
 - 8- Bello S, Ekele B. On the safety of diagnostic ultrasound in pregnancy: Have we handled the available data correctly? *Ann. Afr. Med.* 2012;11(1):1-4.
 - 9- Committee Opinion No 700: Methods for Estimating the Due Date. *Obstet. Gynecol.* 2017;129(5):150-154.
 - 10- Fowler DJ, Lindsay I, Seckl MJ, Sebire NJ. Routine pre-evacuation ultrasound diagnosis of hydatidiform mole: experience of more than 1000 cases from a regional referral center. *Ultrasound Obstet Gynecol.* 2006 Jan;27(1):56-60. doi: 10.1002/uog.2592. PMID: 16273594.
 - 11- Savage JL, Maturen KE, Mowers EL, Pasque KB, Wasnik AP, Dalton VK, Bell JD. Sonographic diagnosis of partial versus complete molar pregnancy: A reappraisal. *J Clin Ultrasound.* 2017 Feb;45(2):72-78. doi: 10.1002/jcu.22410. Epub 2016 Oct 3. PMID: 27696434.
 - 12- Egwuatu VE, Ozumba BC. Observations on molar pregnancy in Enugu, Nigeria. *Int J Gynaecol Obstet.* 1989 Jul;29(3):219-25. doi: 10.1016/0020-7292(89)90258-0. PMID: 2569418.
 - 13- Newhouse I, Spacey A, Scragg B, Szczepura K. The diagnostic value and accuracy of ultrasound in diagnosing hydatidiform mole: A systematic review and meta-analysis of the literature. *Radiography (Lond).* 2022 Nov;28(4):897-905. doi: 10.1016/j.radi.2022.06.005. Epub 2022 Jul 1. PMID: 35785640.