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Original Article

THE ROLE OF ULTRASOUND IN THE DIAGNOSIS OF COMPLETE HYDATIDIFORM MOLE: A CASE REPORT

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Abstract

Complete hydatidiform mole is the commonest form of Gestational Trophoblastic Disease (GTD) that is described as an intrauterine cystic mass with no any associated fetal part or embryonic tissue. Pelvic ultrasound scan serves as an important imaging modality that is used in the diagnosis.

This is 18 years old primigravida who was referred to our facility from a rural hospital for obstetric ultrasound scan with complains of vaginal bleeding 7/7, lower abdominal pains, nausea and vomiting. Her last menstrual period (LMP) was 3 months before presentation. No history of abortion, instrumentation, trauma or use of contraceptives. A preliminary diagnosis of threatening abortion was made at the referring facility. Pelvic ultrasound revealed a bulky uterus containing an intrauterine hypoechoic mass lesion with multiple cystic areas within it given the so called "bunch of grapes" or "snow storm" appearance. No fetal parts are seen. Both ovaries were enlarged measuring about 83x72x67mm and 88x81x63mm on the right and left sides respectively. They

also show prominent follicles bilaterally with the largest seen on the left ovary measuring about 37x32mm. The diagnosis of complete molar gestation was made. The patient was referred to a tertiary facility for further management.

Key words: Complete hydatidiform mole, gestational trophoblastic disease, ultrasound.

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Introduction

Complete hydatidiform mole is the commonest form of Gestational Trophoblastic Disease (GTD) that is described as an intrauterine cystic mass with no any associated fetal part or embryonic tissue.[1,2] It is a rare case with incidence of 1:1000 births.[1,2] Pelvic ultrasound scan is an important imaging modality that is used in the diagnosis of this condition.[3] This is due to its availabity, safety, noninvasive nature and the fact that it does not pose any risk to the mother as it does not use ionizing radiation.[4,5,6,7]

Case Report

R.B, 18 years old primigravida who was referred to our facility from a PHC in Furfuri of Bungudu LG Zamfara state for obstetric ultrasound scan with complains of vaginal bleeding 7/7, lower abdominal pains, nausea and vomiting. She was said to be married 7 months before presentation and her last menstrual period (LMP) was 3 months before presentation. No history of abortion, instrumentation, trauma or use of contraceptives. She attained menarche at 15 years with monthly flow of 4-5/7. A preliminary diagnosis of threatening abortion was made at the referring facility. She has not commenced antenatal care.

Pelvic ultrasound revealed a bulky uterus measuring about 92mm in widest AP diameter containing an intrauterine hypoechoic mass lesion measuring about 157x128x88mm with multiple cystic areas within it given the so called “bunch of grapes” or “snow storm” appearance. No fetal parts are seen. Figure 1a and b. Both ovaries were enlarged measuring about 83x72x67mm and 88x81x63mm on the right

and left sides respectively. They also show prominent follicles bilaterally with the largest seen on the left ovary measuring about 37x32mm. Figure 2 a and b. The diagnosis of complete molar gestation was made. The patient was referred to a tertiary facility for further management.

Figure 1a:

Figures 1a and b: Showing longitudinal(first) and transverse(second) views of a sonograms demonstrating the uterus containing a complete hydatidiform mole devoid of fetal parts.

Figure 1b:

Figures 2a:

Figures 2a and b: Showing longitudinal(first) and transverse(second) views of a sonograms demonstrating the enlarged right ovary.

Figure 2b:

Discussion

Complete hydatidiform mole results when one or two sperm fertilize an ovum which is devoid of DNA.[1] In this condition all the chorionic villi are vesicular with no embryonic tissue or fetal parts.[1] The case under review conform to the above literature. The case under review was found in an 18 years old lady which is similar to the reports by some literature that report occurrence in women of reproductive age .[2,8] The clinical features may include vaginal bleeding, especially in the 4th to 5th month of pregnancy, hyper emesis and the uterus is larger than the gestational age.[1,9] These findings are in conformity to the case under review. Complete mole has the potential of progressing to invasive mole[2] or malignant transformation to choriocarcinoma.[1,2] The use of Imaging modalities especially ultrasound scan plays significant role in the diagnosis of complete molar gestation especially in rural areas where more sophisticated test like serum β- HCG (human chorionic gonadotrophin) are not available.[1] The case under review was diagnosed using trans abdominal ultrasound scan and is in tandem with the literature. The imaging features of complete hydatidiform mole include; enlarged uterus containing a mass with multiple sonolucent cystic areas within it given the so-called bunch of grapes appearance.[1]No fetal parts are seen.[1] There may be theca luteal cysts within the ovaries mostly bilateral.[1] These features conform to the index case. Figure 1b. The patient was referred to a tertiary centre for expertise management.

Conclusion

Ultrasound scan remains an important diagnostic tool in the evaluation of women of reproductive age presenting with PV bleeding especially in rural areas. Early detection of the cause will guide the clinician to make accurate diagnosis and institute appropriate treatment, thereby reducing the morbidity, mortality or disability in such patients.

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