CASE REPORT

HYDATIDIFORM MOLE IN A VIRGIN: A CASE REPORT

Shehu CE, Panti AA, Ukwu AE, Adoke AU.

Department of Obstetrics and Gynaecology, Usmanu Danfodiyo University and Teaching Hospital, Sokoto, Nigeria

Correspondence: Dr Constance E. Shehu

Department of Obstetrics and Gynaecology, Usmanu Danfodiyo University and Teaching Hospital, Sokoto, Nigeria

Tel: +2348036060067 E-mail: doctorkonstance@gmail.com

ABSTRACT

Virginity, for females, is defined by an intact hymen. Pregnancy in the presence of an intact hymen is a rare occurrence. We report a case of hydatidiform mole in a 26 year old single lady with intact hymen. She presented with three months history of amenorrhea, lower abdominal pain, vaginal bleeding with passage of vesicles. The patient denied any history of penetrative sexual intercourse but volunteered a history of two episodes of intense romance with her boyfriend with resultant ejaculation of semen on her thighs. A pelvic mass of about 22 weeks size, without discernible fetal

parts was palpable on abdominal examination while pelvic examination revealed a normal vulva and vagina smeared with altered blood, with an intact hymenal ring. She had suction evacuation and histology confirmed complete hydatidiform mole. The hymen was torn during the procedure and she is on follow up. The intention of this report is to alert clinicians that an abnormal, premalignant tumour can be a complication of pregnancy in a virgin.

Keywords: Intact hymen, pregnancy, hydatidiform mole

INTRODUCTION

A virgin pregnancy is technically defined as a pregnancy in a lady who is a virgin. A virgin is often used to refer to someone who has not yet had sexual intercourse. For females, virginity is defined by an intact hymen¹. The hymen is located about a half- inch inside the vagina. Another definition of a virgin is a girl whose vagina has not been penetrated sexually². There are few scholarly articles on pregnancy in a virgin but few individuals, teenagers mainly, have posted articles on the web and in newspapers that claim that they had got pregnant without penetrative sex³.

Hydatidiform mole belongs to a spectrum of diseases known as gestational trophoblastic diseases resulting from overproduction of the chorionic tissues, which is normally supposed to develop into the placenta^{4, 5}. Hydatidiform mole can be considered as a neoplasm of trophoblastic tissue and involves both syncytiotrophoblast and cytotrophoblast. Hydatidiform moles are nonviable and genetically abnormal conceptions, showing

excessive expression of paternal genes³. In this condition, the placental tissues develop into an abnormal mass, often there is no fetal tissue at all called complete hydatidiform mole but some may show presence of fetal tissue and are known as partial hydatidiform mole⁶.

The diagnosis of hydatidiform mole is clinically important because of its potential to give rise to persistent gestational trophoblastic disease including invasive mole, choriocarcinoma and placental site trophoblastic tumours⁵. The incidence of hydatidiform mole varies worldwide ranging from 0.5 to 8.3 per 1000 live births⁶. We present a case of hydatidiform mole in a lady who had not experienced vaginal penetration and with an intact hymen.

CASE REPORT

The case of Miss S.I a 26yr old youth copper is reported. She presented at the gynaecological emergency clinic with three

months history of amenorrhea, lower abdominal pain and vaginal bleeding of 2/7 days duration. The lower abdominal pain was colicky in nature but did not prevent her from her daily activities. Vaginal bleeding was mild initially but later became profuse with associated passage of vesicles. She had no vaginal discharge. The patient denied any history of penetrative sexual intercourse however; she volunteered a history of two episodes of intense romance with her boyfriend which resulted in his ejaculating semen on her thighs on one of the occasions.

There was history of exacerbated early pregnancy symptoms; there was no fever or neck swelling. She had no history of dizziness, headache or syncope. There was no history of cough, difficulty in breathing and there were no urinary symptoms.

She attained menarche at the age of 12 and menstruated for 4/7 days in a regular cycle of 30 days. She had no history of menorrhagia or dysmenorrhoea and she was not on any form of contraceptives. She had no known medical disorder, but had appendectomy 6yrs ago. She did not smoke or consume alcoholic beverages.

Examination findings revealed a young lady who was conscious but apprehensive. She was pale but anicteric, acyanosed and was not dehydrated. Her axillary temperature was 37.2°C, pulse rate 90 beats per minute, and blood pressure 120/80mmHg. Her heart sounds were I & II only. Her abdomen was full and moved with respiration. A pelvic mass of about 22 weeks size, which was doughy in consistency, non-tender and without discernible fetal parts was felt. Pelvic examination revealed a normal vulva and vagina smeared with altered blood, with an intact hymenal ring.

The result of investigations showed pack cell volume 27%, urinalysis- blood +++, serum beta HCG quantification- 76.4Mi/ml, and platelet count- 300 x 10⁹. The clotting profile, urea, electrolytes, creatinine and liver function test were all within normal range. Genotype was AA and Blood group was O RH positive.

Two units of blood were grouped and typed for her. Result of ultrasound scan showed features in keeping with complete hydatidiform mole. She was admitted and worked up for suction evacuation in the main theatre. She eventually had suction evacuation in the main theatre of a complete mole. Samples were taken for histology which revealed numerous degenerating avascular chorionic villi with hydropic changes. No fetal parts were seen. Result of 48hrs post evacuation beta HCG was 0.9mi/ml. She did well and was discharged home on the third postoperative day.

The patient was followed up forth nightly for six weeks and the beta HCG result was negative. She was given eight weeks appointment.

DISCUSSION

A woman can get pregnant without vaginal penetration if semen is deposited at the vaginal introitus or in contact with the outside of the vagina. Sperm can swim up the vagina if they are strong enough. Many cases of pregnancy in virgins have been reported² but, a case of abnormal pregnancy like hydatidiform mole in a virgin has not been reported to the best knowledge of the authors. However, hydatidiform mole has been reported in literature to have presented as a ruptured ectopic pregnancy⁷.

The common risk factors for hydatidiform mole – extremes of

Figure 1: Intact hymenal ring before evacuation

Figure 2: Torn hymenal ring after suction evacuation

maternal age, high parity and previous history of hydatidiform mole⁸ were not present in this case presented. However the passage of vesicles and the classical snow storm appearance of molar tissue characteristically seen on ultrasonography gave the diagnosis away. The diagnosis was further confirmed by the high levels of β HCG in the blood and the findings of degenerating avascular chorionic villi with hydropic changes at histology. The treatment of hydatidiform mole is suction evacuation as was done in the case presented. This method is currently advocated because it allows for rapid evacuation of the uterus irrespective of the uterine size with minimal blood loss⁹. It also provides specimen for histological assessment of the products of conception. Hysterectomy is an alternative to suction curettage when childbearing has been completed¹⁰ but this was not the situation in the case presented. Although, medical induction of labour and hysterotomy are methods of uterine evacuation, they are not recommended for molar evacuation. These methods increase maternal morbidity, such as blood loss, incomplete evacuation requiring dilation and curettage, and the requirement for caesarean delivery in subsequent pregnancies. They also increase trophoblastic dissemination and the development of post-molar gestational trophoblastic neoplasia requiring chemotherapy¹¹. The hymen was unavoidably torn during the procedure.

About 20% of patients with complete hydatidiform mole would develop malignant sequelae¹¹. Therefore the patient was counselled on the use of contraceptives to avoid pregnancy in the one year follow up period.

This case report highlights the need for more advocacy for sex education at all levels of the Nigerian educational system as this will help reduce the incidence of unintentional pregnancies, whether normal or abnormal, among the youths.

REFERENCES

1. Dalu M. 2010. The case of the pregnant virgin. [On line] Available at <http://www.herword.com/healthdesk/main.php?id>> [Accessed 24 September 2013]
2. Abigail V B. 1986. Virgin can get pregnant [On line] Available at articles.chicagotribune.com [Accessed 24 September 2013]
3. Ishola B. 2011. A pregnant virgin? Raped and pregnant, test says lady is still a virgin. [On line] Available at <http://www.vanguardngr.com> [Accessed 24 September 2013]
4. Nevin J. Gestational trophoblastic disease. In: Bloch B, Dehaeck K, Soeters R, editors. Manual of Practical Gynecological Oncology. 2nd edition. London: Chapman and Hall Medical; 1995. p. 130-46. .
5. Jaffar R, Kalsoom R, Quershi A. Histopathological review of partial and complete hydatidiform mole in a tertiary care hospital, Lahore Pakistan. Biomedica 2011;27:76-80.
6. Mbamara SU, Obiechina NJ, Eleje GU, Akabuike CJ, Umeononihu OS. Gestational trophoblastic disease in a Tertiary Hospital in Nnewi, Southeast Nigeria. Niger Med J 2009;50: 87-9.
7. Mimi G, Arghya B, Sailes R, Pranati B, Biswajit D. Ruptured Complete Hydatidiform Mole in the Fallopian Tube. Iranian Journal of Pathology 2011;6 (4): 216 - 218
8. Garrett LA, Garner EI, Feltmate CM, Goldstein DP, Berkowitz RS. Subsequent pregnancy outcomes in patients with molar pregnancy and persistent gestational trophoblastic neoplasia. J Reprod Med 2008;53:481-6.
9. Evans AC, Soper JT, Hammond CB. Clinical features of molar pregnancies and gestational trophoblastic tumours. Obstet Gynaecol 2003;87:182-205.
10. Soper JT. Surgical therapy for gestational trophoblastic disease. J Reprod Med 1994;39:168-74.
11. Tidy JA, Gillespie AM, Bright N, Radstone C.R, Coleman R.E, Hancock B.W. Gestational trophoblastic disease: a study of mode of evacuation and subsequent need for treatment with chemotherapy. Gynecol Oncol 2000;78:309-12.