

*Trop J Obstet Gynaecol, 31 (2), August 2014*

## **HYDATIDIFORM MOLE IN AMINU KANO TEACHING HOSPITAL, NORTHWESTERN NIGERIA: A FIVE YEAR REVIEW.**

<sup>1</sup>*Attah Raphael Avidime, <sup>1</sup>Mohammed Zakari.*

<sup>1</sup>*Department Of Obstetrics And Gyneacology Aminu Kano Teaching Hospital/Bayero University, Kano, Nigeria.*

### **ABSTRACT**

**Background:** Hydatidiform mole is a benign tumour of the trophoblast tissue and a relatively common gynaecological emergency. It could resolve spontaneously following evacuation, however 9-20% of patients with complete hydatidiform mole go on to have gestational trophoblast neoplasia. It is potentially curable once the correct diagnosis is made and the treatment is commenced early.

**Objective:** This study is aimed at determining the incidence of hydatidiform mole in Aminu Kano Teaching Hospital (AKTH), its age distribution, complication and outcome

**Study Design:** A retrospective review of case of hydatidiform mole managed in Aminu Kano Teaching Hospital, Kano between 1<sup>st</sup> January, 2009 and 31<sup>st</sup> December, 2012. Patients' information were obtained from gynaecology ward admission record book, and patient files were retrieved from the record department and data analysed using SPSS version 11.

**Result:** 87 cases of hydatidiform mole were managed during the study period. 57 cases were retrieved and analysed with a retrieval rate of 66%. The mean age of the was 30.42(SD7.8). The incidence of hydatidiform mole in this study is 1 in 260 deliveries. The mean parity was 3.68 (SD 2.69). The commonest presentation was vaginal bleeding (47.4%). Half of the patients (52.6%) had preevacuation serum beta HCG and only 21.1% had beta HCG estimation at six weeks post evacuation. The only complication was severe vaginal bleeding requiring blood transfusion (10.5%). 10.5% of the cases progressed to choriocarcinoma.

**Conclusion:** Hydatidiform mole remains a common premalignant lesion of the female genital tract. Early diagnosis and strict follow ups with relevant investigation is necessary for early detection of progression to choriocarcinoma.

**Keywords:** hydatidiform mole, incidence, complications, Kano

### **INTRODUCTION**

G e s t a t i o n a l t r o p h o b l a s t i c disease(GTD),constitutes a spectrum of tumors and tumor-like conditions characterized by abnormal proliferation of pregnancy associated trophoblastic tissues of varying propensities for invasion and spread.<sup>1-3</sup> They include hydatidiform mole (HM), invasive mole,

placental-site trophoblastic tumor, and choriocarcinoma.<sup>2,4</sup> Hydatidiform Mole is the commonest GTD.<sup>4,5</sup>

It could resolve spontaneously following

---

Correspondence: Dr Raphael Attah  
Email: [attahraph@yahoo.com](mailto:attahraph@yahoo.com)

evacuation, however 9-20% of patients with complete hydatidiform mole go on to have gestational trophoblast neoplasia.<sup>6</sup>

Hydatidiform mole is unique among human tumours in its acute oncogenesis and the extremely short interval between the development of the disease and its diagnosis.<sup>7</sup> Sonographic diagnosis and hormonal follow up are crucial in its management.<sup>6,7</sup>

The incidence of HM varies greatly throughout the world ranging from 0.5 to 8.3 per 1000 live births and occurs more frequently in Asia compared with Western countries.<sup>1,2,4</sup> Studies from various parts of Nigeria have reported incidence ranging from 1.7 to 6 per 1000 births.<sup>1,5,7</sup> HM presents with amenorrhoea, vaginal bleeding and spontaneous passage of grape-like vesicles, high serum and urinary  $\beta$  human chorionic gonadotrophin ( $\beta$ HCG) levels. There may also be hyperemesis gravidarum, doughy uterus, inappropriate uterine size, bilateral theca lutein cyst and rarely, features of thyrotoxicosis and pre-eclampsia in the first half of pregnancy.<sup>5,8</sup>

The disease could also present as spontaneous abortion which is one of the commonest gynaecological emergencies.<sup>5-8</sup> There have been few reports on HM in our environment and no study on its incidence has been carried out in Kano. This study was therefore carried out to determine the incidence of hydatidiform mole, the clinical features and management outcome at the Aminu Kano Teaching Hospital, Kano, Nigeria.

## METHODOLOGY

A retrospective review of case of hydatidiform mole managed in Aminu Kano Teaching Hospital, Kano between 1<sup>st</sup> January, 2009 and

31<sup>st</sup> December, 2012. Patients' information was obtained from gynaecology ward admission record book, and patient files were retrieved from the record department and data obtained was analysed using SPSS version 11.

## RESULTS

Eighty seven (87) cases of hydatidiform mole were managed during the study period. 57 cases were retrieved and analysed with a retrieval rate of 66%. The mean age of the patient was 30.42(SD 7.8). In the study period we had a total of 22,581 deliveries, given an incidence of hydatidiform mole in this study to be 1 in 260 (4 in 1000) deliveries. Table 1, shows age distribution of patients with hydatidiform mole with age range of 20-49yrs. The mean age of the patient was 30.42(SD 7.8). The mean parity was 3.68 (SD 2.69). The commonest presentation was vaginal bleeding (47.4%). Half of the patients (52.6%) had preevacuation serum beta HCG and only 21.1% had beta HCG estimation at six weeks post evacuation. The only complication was severe vaginal bleeding requiring blood transfusion (10.5%). 10.5% of the cases progressed to choriocarcinoma.

### Age Distribution

AGE GROUP	FREQUENCY	PERCENTAGE
<20	3	5.3
20-24	9	15.8
25-29	12	21.0
30-34	15	26.3
35-39	12	21.0
40-44	3	5.3
45-49	3	5.3
Total	57	100

Mean age=30.42 yrs  $\pm$  7.8

### Parity Distribution

PARITY	FREQUENCY	PERCENTAGE
0-4	39	68.4
=5	18	31.6
<b>Total</b>	<b>57</b>	<b>100</b>

Mean parity 3.68±2.69

### Clinical Presentation

PRESENTATION	FREQUENCY	PERCENTAGE
Vaginal bleeding	27	47.4
Excessive uterine size	6	10.5
vomiting	3	5.3
>1 presentation	21	36.8
<b>Total</b>	<b>57</b>	<b>100</b>

Serum Bhcg (Pre-Evacuation)



52.6% of the cases had pre-evacuation BHCg done.

### Post Evacuation BHCg

FOLLOW UP	FREQUENCY	PERCENTAGE
2WEEKS	2	10.5
4 WEEKS	7	36.8
6WEEKS	4	21.1

21.1% had BHCg done at 6 weeks follow up. 10.5% (2 cases) progressed to have choriocarcinoma

### DISCUSSION

The incidence of hydatidiform mole of 1:260 deliveries in this study is higher than 1:1000 pregnancies in the united states of America,<sup>6</sup> 1:357 reported in Jos, north central Nigeria,<sup>5</sup> and 1:588 pregnancies reported at Ile-Ife ,south west Nigeria.<sup>5</sup> but lower than the incidence of 1:120 reported in Taiwan.<sup>2,6</sup>It is also lower than 1:172 and 1:184 deliveries reported from Ibadan and Lagos –both in Nigeria.<sup>5</sup> The reason for this geographical variation is unknown but the fact that these are hospital-based studies in tertiary referral centers in an environment with varying degrees of hospital utilization may be contributory.

Most of the patients (84%) were between the ages of 20-39 years. This was similar to the finding in Calabar in the eastern part of Nigeria.<sup>9</sup> Many authors had agreed that the risk of hydatidiform mole is higher in pregnant woman who are under 20 years and above 35 years of age, with a progressive increase after 40 years .<sup>2,3,11</sup> This is however not the case in this study, as 5.3% and 31.6% of the patients were less than 20years and greater than 35years of age respectively, which is similar to the report from Jos and Ilorin north central Nigeria.<sup>5,7</sup> The reason for this geographical variation in age at presentation may be because most of our patients are illiterates and may not know their actual age. Mean age at presentation here was 30.42years which is similar to the finding in Ilorin and Maiduguri.<sup>7,12</sup>

The most common complication was severe vaginal bleeding requiring blood transfusion (10.5%). This was also reported in Lagos Western Nigeria.<sup>10</sup>

Suction curettage was the method of treatment in this study. This method is currently advocated

because it allows for rapid evacuation of the uterus irrespective of the uterine size with minimal blood loss.<sup>1,3</sup> It also provides specimen for histological assessment of the products of conception, reduces the danger of uterine perforation, minimizes injury to the blood vessels and therefore reduces the chance of trophoblastic tissue embolization.<sup>5,7</sup> It is associated with a low risk of chemotherapy usage for gestational malignancy.<sup>1,6,7</sup> Because the RhD antigen is present in trophoblasts, patients with an Rh-negative blood type should receive Rh

About 20% of patients with complete hydatidiform mole would develop malignant sequelae.<sup>6,12</sup> In this study, approximately 10.5% of the cases progressed to develop choriocarcinoma, this is similar to 9.4% reported in Onitsha South eastern Nigeria.<sup>11</sup> No maternal mortality was recorded in this study. None of the patients in this study completed the recommended period of follow up. This was similar to the findings in other studies.<sup>5,7,10</sup>

## CONCLUSION

Hydatidiform mole remains a common gynecological emergency in AKTH, Kano north west Nigeria. Age at presentation varies from one geographical location to the other, and bleeding per vaginam often necessitating blood transfusion is a common complication. Early diagnosis and strict follow up of cases of hydatidiform mole with relevant investigations is necessary for early detection of progression to choriocarcinoma. It is therefore recommended that patients with hydatidiform mole should be adequately counseled on strict adherence to the recommended follow up period for early detection of progression to choriocarcinoma.

## REFERENCE

1. 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.
2. Nevin J. Gestational trophoblastic disease. In: Bloch B, Dehaeck K, Soeters R, editors. *Manual of Practical Gynecological Oncology*. London: Chapman and Hall Medical; 1995. pp. 130–46
3. Berkowitz RS, Goldstein DP. Clinical practice. Molar pregnancy. *N Engl J Med.* 2009;360:1639–45
4. Moore LE, Hernandez E. Hydatidiform mole. *eMedicine Journal*. [Last accessed on 2010 Sep 14]. Available from: <http://emedicine.medscape.com/article/254657>
5. Amaka N, Ocheke, Jonathan Musa, Alexander O, Uamai. Hydatidiform mole in Jos, Nigeria. *Niger Med. J.* 2011, Oct-Dec. 52(4):223-6.
6. Enrique Hernandez: Gestational trophoblastic neoplasia. *emedicine* :2005 1-11
7. Jimoh AAG, Ajayi AB, Saidu R. Hydatidiform mole in University of Ilorin Teaching Hospital: An 8 year Review. *International Journal of Tropical medicine*, 2012;7(2), 57-60
8. Evans AC, Soper JT, Hammond CB. Clinical features of molar pregnancies and gestational trophoblastic tumours. *Obstet Gynaecol.* 2003;87:182–205.
9. Ekanem EI, Etuk S J, Itam H I, Ekanem A D and Ekagbua J E. Hydatidiform mole in calabar. A 1. Berkowitz RS, Goldstein DP. Clinical practice. Molar pregnancy.

- N Engl J Med. 2009;360:1639–450 year review. Mary Slessor journal of medicine 2005.5 (1) 72-76.
10. Eniola O A, mabayoje P, Ogunniyi S O. Hydatidiform mole in Ile Ife, Nigeria. A 10 year review. J. Obstet. Gynaecol. 2001, 21 (4) 405-7.
11. Obiechina NJA, Udigwe G O, Obi R A. Molar pregnancy: A 10 year review at Onitsha, Nigeria Journal of medical investigation and practice. 2001, 26-31.
12. Audu BM, Takai UI, Chama CM, Bukar M and Kyari O. Hydatidiform mole as seen in a Teaching Hospital; A 10 year review. J. obstet. Gynaecol. 2009, 29:322-5.