

THE CLINICAL PRESENTATION OF GESTATIONAL TROPHOBLASTIC DISEASE IN CALABAR, NIGERIA

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ABSTRACT

A total of 56 patients seen in the University of Calabar Teaching Hospital Calabar Nigeria with gestational trophoblastic disease were studied to establish the pattern of clinical presentation. Relevant information was obtained from the case files and analyzed.

An incidence of 1:270 deliveries was established. Twenty-six (55.3%) patients were aged 21-30 years. They were mostly multiparous women (57.4% being para 1-4) and 76.5% were in social classes 1V and V. Thirty-six (53.1%) patients presented in the second trimester of gestation. The commonest modes of presentation were clinical anaemia 39 (82.9%), vaginal bleeding 38 (80.8%), passage of molar vesicles 32 (68.1%) and abdominal pains 28 (59.6%). Recurrent molar disease occurred in 6.4% of the patients. The 4 cases of choriocarcinoma seen presented within 6-10 months from the antecedent pregnancy which were previous hydatidiform mole in 3 and abortion in one. The mean age of the patients was 39 ± 4 years. Three of the patients had cough with associated haemoptysis in two while one was diagnosed at autopsy.

There is need for public enlightenment for women with these symptoms to present early in the hospital for proper diagnosis and treatment. Also the clinicians working in our environment should include gestational trophoblastic disease in their differential diagnosis in patients presenting with these clinical features.

KEYWORDS: gestational trophoblastic disease, clinical presentations.

INTRODUCTION

Gestational trophoblastic disease represents a failed pregnancy. It affects women in their reproductive age group when their productive and social commitments are at the peak (Ogunbode 1978, Agboola and Abudu 1974). Its contributions to high maternal morbidity and mortality are well acknowledged (Agboola and Abudu 1974, Grudzinkas 1999) particularly in the developing countries of Asia and Africa where the disease is common (Aboyaji and Ijaiya 2000; Kwame-Aryee 1998). However, with early diagnosis, prompt and effective treatment the disease has a good prognosis (Gruzinkas 1999; Adeleye and Osinusi 1980; Howie 1995). Choriocarcinoma, a malignant form of the disease, is one of the first human malignancies cured with chemotherapy (Adeleye and Osinusi 1980; WHO 1986). Unfortunately this favourable outcome of the disease is masked by difficulty in diagnosis due to its variable clinical presentation (Agboola and Abudu 1974; Aboyaji and Ijaiya 2000).

The disease affects many organs and systems in the body and therefore its presentation mimics many diseases. Many authors describe it as a great masquerader of symptoms (Adeleye and Osinusi; WHO 1986). There are also great geographical variations in the incidence and presentations of the disease in many countries of the world and even in different regions of the same countries for certain unknown reasons. The

difficulty in diagnosis has been overcome in the developed world by liberal or routine use of ultrasonographic studies and measurement of β -unit of human chorionic gonadotrophin in early pregnancy complications (Varma 1990; Ma and Wong 1990; Rorbert, John and Sharma 2000). These facilities are either lacking or in short supply in developing countries (Kwame-Aryee 1998; Agboola and Abudu 1984). It is therefore, important for the clinicians in the developing countries to be conversant with the clinical features of the disease in the area they practice. If these are coupled with a high index of suspicion, the diagnosis of this condition will be more attainable.

In Calabar (in the South-South geopolitical zone of Nigeria) with her socio-economic and cultural diversity, the incidence of this disease and its pattern of presentation have not yet been studied. Hence the aims of this study were to establish the incidence of gestational trophoblastic disease in Calabar and to unfold its pattern of clinical presentation. It is hoped that the findings of this study will ultimately help in the reduction of maternal morbidity and mortality associated with gestational trophoblastic disease in Calabar.

MATERIALS AND METHODS

This study was carried out in University of Calabar Teaching Hospital (UCTH) Nigeria over a ten-year period (1st January 1992 to 31st December 2001).

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Calabar is the capital of Cross River State that is located in the South South geopolitical zone of Nigeria. It has a population of 1.9 million people. It is a cosmopolitan town inhabited by the indigenous Efik, Ibibio, Annang, Igbo and other tribes in Nigeria. They are mainly civil servants, traders, farmers and fishermen. The University of Calabar Teaching Hospital is the only tertiary health institution in the state. Though a tertiary institution, it receives patients directly as they present themselves and referrals from private clinics, General Hospitals in Cross River, Akwa Ibom, Abia, Benue states and the Republic of Cameroun.

The case-files of all patients managed for gestational trophoblastic disease during this period in the Maternity Annex of the hospital were retrieved from the hospital's medical records department. Information was also obtained from the operation theatre registers and the mortuary records. Information obtained included age of patient, gestational age at presentation, parity, social class, clinical features, haemoglobin levels, and duration of follow up. The total number of deliveries during the period was also noted. The data were analysed using tables, absolute numbers and percentages. Anaemia was defined as haemoglobin concentration of less than 10 grams per decilitre. The social Class analysis was based on Registrar General's 5-point occupational scale (Blane, 1982) modified to suit our environment (Etuk, Asuquo, Itam and Ekanem 1999) as follows:

Social class	Description	Examples
1	Profession	lawyers
	Business	large employers
11	Lesser profession	Teachers
	Trading	Big traders
111	Skilled non-manual	Clerical workers
	Skilled manual	Electricians
1V	Semi-skilled manual	Farmers, Petty traders
V	Unskilled manual	Labourers

RESULTS

A total of 56 patients were managed for gestational trophoblastic disease during this period. Only 47 case files were available and had complete information for analysis. A total of 15, 134 deliveries were conducted during the period giving an incidence of 1:270 deliveries. Out of the 47 cases, 42 were

hydatidiform mole while 4 were choriocarcinoma. The incidence of choriocarcinoma was 1:3783 deliveries.

Table 1 shows socio demographic and reproductive characteristics of the patients with the disease. Twenty-six (55.3%) patients were aged 21-30 years, 4 (8.5%) were less than 20 years. Twenty-seven (57.4%) were para 1-4 while 36 (76.5%) were in social classes IV and V. Only one (2.1%) patient belong to social class I. Also the gestational age at presentation showed that 36 (53.1%) of the patients presented in the second trimester. Only 2 (4.3%) were seen before 8 weeks of gestation.

TABLE 1. SOCIODEMOGRAPHY AND REPRODUCTIVE CHARACTERISTICS

Maternal Age distribution

Age (years)	No	%
<20	4	(8.5)
21-30	26	(55.3)
31-41	9	(19.1)
41 and above	3	(6.4)
Not stated	5	(10.6)
Total	47	(100)

Parity distribution of Hydatidiform mole

Parity	No	%
0	1	(2.1)
1-4	27	(57.4)
5-9	12	(25.5)
10 and more	4	(8.5)
Not stated	3	(6.4)
Total	47	(100)

Social Class Distribution of Hydatidiform mole

	No	(%)
I	1	(2.1)
II	3	(6.4)
III	7	(14.9)
IV	11	(23.4)
V	25	(53.1)
Total	47	(100)

Gestational Age at presentation

Gestational Age (Weeks)	No	(%)
8 or less	2	(4.3)
9-12	5	(10.6)
13-16	20	(42.5)
17-21	16	(34.0)
25 and above	4	(8.5)
Total	47	(100)

Table 2 shows the presenting features. Abnormal vaginal bleeding, passage of vesicles and lower abdominal pains were the presentations in 38 (80.80%), 32 (68.1%), and 28 (59.6%) respectively. Clinical anaemia was seen in 39 (82.9%). This anaemia was moderate to severe in 32 (68.2%) patients. Recurrent molar disease was seen in 3 (6.4%) of the patients. Features suggestive of bleeding disorder, thyroid dysfunction and eclampsia or local neurological deficits were not seen in these patients.

The 4 cases of choriocarcinoma presented within interval of 6-10 months from the antecedent pregnancy which were previous mole in 3 and abortion in one. The mean age of presentation was 39 ± 4 years with a range of 35 to 43 years. Three of them presented with cough while 2 had associated haemoptysis. One was diagnosed at autopsy.

Thirty (63.8%) of the patients were seen in the follow-up clinic at 3 months and 19(40.4%) at 6 months. Only 3 patients were followed up to one year.

TABLE 2: (N = 47) CLINICAL PRESENTATIONS

Clinical features	No	(%)
Anaemia	39	(82.9)
Abnormal vaginal bleeding	38	(80.8)
Passage of Vesicles	32	(68.1)
Abdominal Pains	28	(59.6)
Large for Gestational age	26	(55.3)
Small for gestational age	7	(14.9)
Ovarian cyst	11	(23.4)
Pre-eclampsia	5	(10.6)
Hyperemesis gravidarum	4	(8.5)
Recurrent molar pregnancy	3	(6.4)

DISCUSSION

This study reveals an incidence of gestational trophoblastic disease of 3.7 per 1000 (1:270) deliveries in Calabar. This agrees with what obtains in other parts of Nigeria (Ogunbode 1978; Agboola and Abudu 1984; Aboyeji and Ijaya 2000). It is lower than the incidence of 11.6 per 1000 deliveries in Indonesia, and 8.0 per 1000 deliveries in China. However, it is higher than 1 per 1000 in Jamaica 0.8 per 1000 in Italy and 0.5 per 1000 in U.S.A (WHO 1986). Environmental, nutritional and racial factors have been used to explain this variation in incidence between the different regions of the world (Grudzinkas 1999; Ma and Wong 1990; Palmar 1994). It is possible that the incidence reported here may not reflect the true situation, in view of the paucity of diagnostic facilities in our environment and some cases may have been managed as missed abortion or incomplete abortion. Besides, some patients may even die of the disease at home or in spiritual churches out of ignorance.

In developed nations, gestational trophoblastic disease is most common towards the end of reproductive life (30-45 years). In this study the incidence is highest between 21 and 30 years of age. This seems to be the picture in other developing countries (Ogunbode 1978; Agboyeji and Ijaiya 2000; Kwame-Aryee 1998). This may be a reflection of the age structure of our obstetric population as our women start their reproductive career earlier than their counterparts in the developed nations. Of the four cases of choriocarcinoma reported in this study, three were in women aged 40 years and above. This probably suggests age as a risk factor for this disease (WHO 1986; Sheridan et al 19993; Smith, Reilly and Newland 1993).

That the majority of the patients with gestational trophoblastic disease in this study were multiparous agrees with the findings from Lagos (Agboola and Abudu 1984) Ibadan (Ogunbode 1978) and Ilorin (Agboyeji and Ijaiya 2000). Even reports from Middle East also confirm this (Wei and Onyang). However, it is difficult to separate the effect of parity from the impact of age as parity, generally increases with increasing maternal age (Adeleye and Osinusi 1980; WHO 1986; Briggs 1995).

Most of the patients (76.6%) in this study were in social classes IV and V. This supports the findings of others, that gestational trophoblastic disease is common amongst women of low socio-economic class (Grudzinkis 1999; Varma 1990; Nakano 1980; Sheridan et al 1993). Although social class has not been identified as an independent risk factor for this disease, other factors such as pregnancies at extremes of reproductive age, high parity, environmental and racial may explain this high incidence among this group of women.

In developed countries, most of the patients with gestational trophoblastic disease present within the first trimester (Grudzankis 1999; Robert et al 2000; Smith et al 1993). This is different from what is reported in most developing countries where the presentation is made mostly in the second trimester (Agboola and Abudu

1984; Aboyeji and Ijaiya 2000; Adeleye and Osinusi 1980). About 76.5% of the patients in this study presented at a gestational age of 13 to 21 weeks. This may be due to ignorance, poverty and superstition on the part of the patients and poor index of suspicion and lack of diagnostic aids on the part of our medical practitioners.

The pattern of presentation of the patients in this study was similar to that in other parts of the country (Agboola and Abudu 1984; Agboyeji and Ijaiya 2000). However, it is different from the pattern in developed countries where spontaneous expulsion of vesicular mole is rare (Howie 1995; Varma 1990; Robert et al 2000) and most patients present with hyperemesis gravidarum, preeclampsia, thyroid dysfunctions and evidence of coagulopathies (Grudzinkas 1999). Passage of vesicular mole formed a major pointer to diagnosis in this study. This again emphasises on poor index of suspicion of this disease. Anaemia was the commonest mode of presentation in this study and has always been a constant finding in most other studies of gestational trophoblastic disease. Therefore in any patient with anaemia in early pregnancy, if it is associated with vaginal bleeding, gestational trophoblastic disease should be a prominent differential.

The loss to follow-up of the majority of patients after the first three months contrasts what obtains in developed countries where up to 97% of the patients could still be seen at two years (Smith et al 1993; Curry et al 1975).

In conclusion, gestational trophoblastic disease is not rare in Calabar, Nigeria. The diagnosis is usually delayed due to late presentation in hospital by the patients and poor index of suspicion by our doctors as a result of lack of diagnostic aids in our health facilities. Hence, there is need for public enlightenment campaign to encourage all our women with abnormal vaginal bleeding to present to hospital. There is need for a high index of suspicion on the part of our clinicians for gestational trophoblastic disease particularly where there is anaemia in early pregnancy associated with abnormal vaginal bleeding. Routine use of ultrasonography in patients with abnormal vaginal bleeding in early pregnancy is strongly advocated.

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