Journal of Gynecological Research and Obstetrics

Onyinye Onyeka Okonkwo[1], George Uchenna Eleje[2]* and John EN Okonkwo[3]

[1]JENO Hospital. No 23 Nnamdi Azikiwe Road Trans-Ekulu Enugu, Enugu State. Nigeria
[2]Department of Obstetrics and Gynecology, Faculty of Medicine, College of Health Sciences, Nnamdi Azikiwe University, Nnewi Campus, PMB 5025, Nnewi, South-east, Nigeria
[3]JENO Hospital. No 23 Nnamdi Azikiwe Road, Trans-Ekulu Enugu, Enugu State Nigeria

Dates: Received: 07 August, 2015; **Accepted:** 07 November, 2015; **Published:** 09 November, 2015

***Corresponding author:** Eleje George Uchenna, Department of Obstetrics and Gynecology, Faculty of Medicine, College of Health Sciences, Nnamdi Azikiwe University, Nnewi Campus, PMB 5025, Nnewi, South-East, Nigeria, E-mail: georgel21@yahoo.com

www.peertechz.com

Keywords: Choriocarcinoma; Jehovah's Witness; Durable Power of Attorney; Polychemotherapy

Case Report

Gestational Choriocarcinoma in a Jehovah's Witness: A Case Report

Abstract

Introduction: Due to strong religious faith and beliefs against blood transfusions, Jehovah's Witness patients often pose tight spot for obstetrician-gynecologists. Myelosuppressive effects of chemotherapy in gynecology-oncology settings are additional source of worry.

Case Presentation: A 25-year-old P0+1 Nigerian woman presented with subcostal pains, dyspnea and cough productive of bloody sputum of one month duration. There was no vaginal bleeding.

She had spontaneous miscarriage and evacuation of retained products of conception twice at another health facility with histology confirming choriocarcinoma. She was anemic and had a Durable-Power-of-Attorney card forbidding blood transfusion. She received Iron dextran and erythropoietin prior to each of three courses of polychemotherapy. Beta-Human Chorionic Gonadotrophin returned to normal 456 days later and had normal pregnancy sixteen months later.

Conclusion: This first reported case of gestational choriocarcinoma in a Jehovah's Witness who survived without obstetrics sequalae is illustrative of such managed in resource-poor setting while maintaining patient autonomy.

Introduction

Management of Jehovah's Witness patients can be challenging and often a problem to doctors because the code of ethics requiring a medical practitioner to "always take measures that will lead to the preservation of life does not pin down on the conflict between the right of a patient to decide on what medical measures to agree to and the doctors' code of ethics" [1]. This situation is even more worrisome in gynecologic oncology settings where anemia and myelosuppressive effects of chemotherapy can be very challenging [2]. We present a first case of metastatic choriocarcinoma in a Jehovah's Witness patient who survived and went further to achieve another pregnancy including a planned approach to management of Jehovah's witnesses numbering 7.9 million worldwide [3]. In recognizing these patients' rights, Bloodless Surgical measures and schemes, better called Patients Blood Management have been established [4].

Case History

Mrs EO, was a-25-year-old P0+1 Nigerian woman with bilateral subcostal pains, dyspnea on exertion and hemoptysis of one month duration. This was associated with significant weight loss and night sweats. There was no vaginal bleeding.

She had a spontaneous abortion in the ninth week of pregnancy. She had evacuation of retained products of conception (ERPC) done twice at 18-day intervals at another health facility with histology confirming choriocarcinoma. She was discharged one week after repeat ERPC on hematinics. She presented to us on 12/7/2012 two weeks after discharge. Her past medical history was significant only for an appendicectomy.

Physical examination revealed a young healthy-looking woman in respiratory distress. She was afebrile (36°C), pale and slightly icteric. She was not dehydrated and had no pedal edema. She weighed 60kg and was 1.5meters tall.

The cardiovascular system examination was normal except that the apex beat was on the 6th left intercostals space along the mid-clavicular line. The respiratory rate was 30/min and the chest was clinically normal.

The liver was enlarged and measured 4cm below the right costal margin, mid-clavicular line. There was positive shifting dullness. A tender cystic mass probably uterine of 18 weeks gestation was palpated. Vaginal examination confirmed the above abdominal finding. The vaginal walls and cervix were normal.

βhCG titre was positive to 800,000 IU/L. Other investigations were requested. She was placed on Iron dextran, Erythropoietin, Vitamin C and complete bed rest.

Chest X-ray findings were consistent with metastatic choriocarcinoma. She was counselled on the diagnosis of FIGO stage III with high risk. She was also told the management options. Her PCV on admission was 20%. Due to her religious beliefs she explained in very clear terms her absolute preference of non-blood management and presented a Durable Power of Attorney (DPA) confirming her request.

Because of her diagnosis, the corresponding therapy resulted in commencement of intravenous Frusemide 80mg stat, Digoxin 0.5mg two times daily and Mist pot citrate for 24hours. The βHCG result at this time was being awaited.

On the second day of admission she was placed on subcutaneous Erythropoietin 4000IU on alternate days for one week, two ampoules of Iron dextran to run in 500mls of 5% Dextrose water slowly and hematinics without Folic acid.

She was commenced on a five-day course of cytotoxics: i.v. methotrexate; i.v. folinic acid; i.v vincristin; i.v etoposide; i.v. actinomycin D; and iv cyclophosphamide. This treatment was repeated twice at 21-and 25-day intervals. She was counselled on contraception and she accepted Microgynon.

βhCG was followed until it became negative (Table 1). She was discharged after 456 days. Ten weeks after her discharge she became pregnant.

Discussion

This challenging case demonstrates the need for critical thinking and a multidisciplinary approach. Most Jehovah's Witness patients are in possession of the durable power of attorney (DPA) cards detailing their desires and listing any minor blood components and blood conservation methods acceptable to them [5]. When such a patient presents, it is imperative to counsel the patient appropriately and confirm their possession of DPA cards. Patients' beliefs and informed choices should be respected [6]. We strongly believe that the doctor's obligation is to respect the wish of his/her patient and not that of her family or community.

As was in our patient, a very effective alternative for the correction of pre-chemotherapy anemia is the administration of recombinant human erythropoietin. Its action is mainly based on its effect on bone marrow which in turn increases red blood cell mass [6]. This agent is acceptable to many Jehovah's Witnesses and patients may require high dose of treatment. Nevertheless, its safety of use has provoked concerns due to previous thromboembolic and cardiovascular events reported and there is fear and concern that such agents might act as growth factors for certain tumors [7] Granulocyte-macrophage colony-stimulating factors and platelet growth factor could also be considered in gynecologic malignancies [7].

In Boufettal et al., report of eight cases of gestational choriocarcinoma managed in Casablanca, all the patients presented with bleeding and metastases were found in 3 patients, including 2 with pulmonary metastasis [8]. Polychemotherapy was used in 4 cases, monochemotherapy in 3 and one case received only radiotherapy. Of the 8 cases, 2 patients died and 6 had complete remission [8]. Our patient's clinical findings, treatment and treatment outcome were quite similar except for vaginal bleeding. However, in cases of uterine bleeding with acute hemorrhage, management with less invasive procedures such as uterine artery embolization, intrauterine tamponade, intravenous estrogen and uterotonic agents such as methylergonovine and hemoglobin-based oxygen carriers may be useful. With co-existing coagulopathy, hemostatic drugs including aminocaproic acid, aprotinin and tranexamic acid, recombination coagulation factors (VIIa, VIII, IX), desmopressin and administration of vitamin K could be very helpful [8,9]. Multiagent chemotherapy is standard for the initial management of high-risk gestational trophoblastic neoplasia. We strongly believe the patient under review has high risk. Despite all these measures, our patient survived and achieved pregnancy subsequently.

Table 1: The falling pattern of the beta human chorionic gonadotrophin (hCG) level on follow-up.

Date	hCG iu/L
12-7-12	800,000
27-8-12	375,000
17-9-12	308
24-9-12	198
02-10-12	127
09-11-12	42
10-12-12	24
08-03-13	5
07-10-13	1

Although we could consider the pregnancy an achievement in this context, however, some authorities could view this differently. This is so because, since the patient had been discharged with contraceptive instructions, her early conception could be considered an undesirable event and inevitable failure of the management rather than an "achievement".

The prognosis for cure of women with choriocarcinoma is good even when the disease has spread to distant organs, especially when only the lungs are involved, as in our patient. Therefore, the traditional TNM staging system has limited prognostic value [10]. The probability of cure depends on the following: histologic type (invasive mole or choriocarcinoma), extent of spread of the disease/ largest tumor size, level of serum beta-hCG, duration of disease from the initial pregnancy event to start of treatment, number and specific sites of metastases, nature of antecedent pregnancy and the extent of prior treatment. Most of these factors operate in our patient.

Selection of treatment depends on these factors plus the patient's desire for future pregnancies. The beta-hCG is a sensitive marker to indicate the presence or absence of disease before, during, and after treatment. Given the extremely good therapeutic outcomes of most of these tumors, an important goal is to distinguish patients who need less-intensive therapies from those who require more-intensive regimens to achieve a cure.

In conclusion, this is the first reported case of a Jehovah's Witness patient with metastatic gestational choriocarcinoma, and who survived without obstetrics sequalae, her resource-poor-setting notwithstanding. Gynecologists and physicians should be aware that patient blood management is available in the management of this challenging scenario in resource-poor settings. It is hoped that future development in clinical medicine are needed. This is more so when the Nigerian Supreme Court holds "that under normal circumstances no medical doctor can forcibly proceed to apply treatment to a patient of full and sane faculty without the patient's consent, particularly if that treatment is of a radical nature such as surgery or blood transfusion" [11].

Consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

References

1. Fawehinmi G (2010) Nigerian Weekly Law Reports 28.
2. Adenifuja KO, Akadiri O, Okunola TO, Ajayi M, Bakare B, et al. (2015) Outcomes and Challenges in the management of gestational trophoblastic diseases in a tertiary institution in Nigeria. Trop J Obstet Gynecol 32: 143-149.
3. 2013 Service Year Report of Jehovah's Witnesses World-wide (2014). 2014 yearbook of Jehovah's witnesses.
4. Woolley S (2005) Jehovah's Witnesses in the emergency department: what are their rights? Emerg Med J 22: 869-871.
5. Remmers PA, Speer AJ (2006) Clinical strategies in the medical care of Jehovah's Witnesses. Am J Med 119: 1013-1018.
6. Fried W (1995) Erythropoietin. Annu Rev Nutr 15: 353-377.
7. FDA Alert (2014) Information for healthcare professionals: erythropoiesis stimulating agents (ESA) [Aranesp (darbepoietin), Epogen (epoetin alfa), and Procrit (epoetin alfa)], Rockville, MD: Food and Drug
8. Boufettal H, Khalkane L, Noun M, Hermas S, Samouh N (2014) Gestational choriocarcinoma at Ibn Rochd Hospital, Casablanca, 2004-2010. East Mediterr Health J 19: S208-212.
9. Colthren CC, Moore EE, Long JS, Haenel JB, Johnston JL, et al. (2004) Large volume polymerized haemoglobin solution in a Jehovah's Witness following abruption placenta. Transfus Med 12: 241-246.
10. Edge SB, Byrd DR, Compton CC, Fritz AG, Greene FL, et al. (2010) AJCC Cancer Staging Manual. 7th ed, Springer 439.
11. Osipitan T (2001) Monthly Judgment of the Supreme Court of Nigeria 116.

Citation: *Okonkwo OO, Eleje GU, Okonkwo JE (2015) Gestational Choriocarcinoma in a Jehovah's Witness: A Case Report. J Gynecol Res Obstet 1(1): 010-012.*