

Case Report

PERIOPERATIVE COAGULATION SAFETY MUST NOT BE ASSUMED

Ogbonnia CC¹, Elendu KC², Uwanuruochi K^{3,4*}

¹Department of Medicine, Federal Medical Centre, Umuahia, PMB 7001, Nigeria.

²Department of Radiology, NSIA Umuahia Diagnostic Centre, Federal Medical Centre, Umuahia, Nigeria.

³Department of Medicine, College of medicine and health sciences, Gregory University Uturu Amachara campus, Abia State, Nigeria.

⁴Department of Medicine, Federal Medical Centre, Umuahia, Nigeria.

***Corresponding Author:** Dr Uwanuruochi Kelechukwu; +2348037407703; kcgrace2002@yahoo.com

Abstract

Background: Coagulation safety has commonly been assumed in patients with no prior history of deep venous thrombosis, atrial fibrillation, morbid obesity or prolonged immobilization or other known prothrombotic states.

Case presentation: A 60-year-old hypertensive woman with no previous history of deep venous thrombosis presented with sudden breathlessness eight days after an abdominal hysterectomy. She was found to have acute pulmonary embolism confirmed on chest computerized tomography. Prompt diagnosis aided appropriate management and quick recovery.

Conclusion: Life-threatening acute pulmonary embolism can complicate major surgery in middle age.

Keywords: Acute pulmonary embolism, Perioperative coagulation assessment, Thrombo-embolic prophylaxis

Cite this article: Ogbonnia CC, Elendu KC, Uwanuruochi K. Perioperative coagulation safety must not be assumed. Niger Delta J Med Med Res. 2026;5(3):93–95.

INTRODUCTION

This is a report of acute pulmonary embolism that developed eight days after a hysterectomy in a middle-aged woman. A coagulation complication was apparently not anticipated in this patient. This life-threatening complication must therefore be considered in every adult undergoing major surgery. Physicians are encouraged to be aware of the signs of increased risk and the prophylactic measures available.

CASE PRESENTATION

Mrs OG, a 60-year-old retired nurse who resides in Umuahia, presented to the emergency room of our hospital seven days after undergoing a total abdominal

hysterectomy at a peripheral centre, following a two-day history of breathlessness. She also had epigastric pain and one episode of tarry stool and had used diclofenac for post-operative pain relief. She was hypertensive but had no calf or leg pain. The indication for hysterectomy was a suspicious Pap smear, but the histology result ruled out malignancy. A history of perioperative coagulation prophylaxis could not be obtained.

On examination, she was afebrile, anicteric, pale, not cyanosed, not dehydrated, with no digital clubbing or pedal oedema, and was conscious and well oriented. Her pulse rate was 88 beats/minute, regular and of normal volume. Blood pressure was 130/80 mmHg, respiratory rate was 24 cycles/minute, and oxygen saturation was 88%. Breath

sounds were vesicular but reduced in the lower lung zones. A midline infra-umbilical surgical scar with sutures was seen, with tenderness elicited in the epigastrium. There was no tenderness or differential warmth in the lower limbs.

Investigation results included left pleural effusion and cardiomegaly (60%), predominantly left ventricular, on chest radiography; features of pulmonary embolism, massive left pleural effusion with atelectasis, and right pneumothorax on computed tomography pulmonary angiography (Figures 1 and 2); left ventricular hypertrophy on electrocardiography; and left ventricular diastolic dysfunction on two-dimensional echocardiography. Haemoglobin level was 11.0 g/dL (12.0–16.0), serum creatinine was 46 $\mu\text{mol/L}$ (39–91), and estimated glomerular filtration rate was $>90 \text{ mL/min/1.73 m}^2$. Pleural aspirate cytology showed chronic inflammatory cells with no cytologic atypia, while culture grew *Klebsiella* and *Enterococcus* sensitive to perfloracin, gentamycin, and levofloxacin.

An assessment of pulmonary embolism complicating hysterectomy was made, along with gastritis induced by non-steroidal anti-inflammatory drugs.

A urethral catheter was passed, oxygen was supplemented via a non-rebreather face mask at 10 litres/minute, subcutaneous enoxaparin 40 mg daily was prescribed, and pneumatic compression stockings were recommended for both legs. She was also given omeprazole tablets at 20 mg twice daily.

Oxygen saturation improved to 96%. She improved over a two-week period and was discharged to the outpatient clinic.



Figure 1

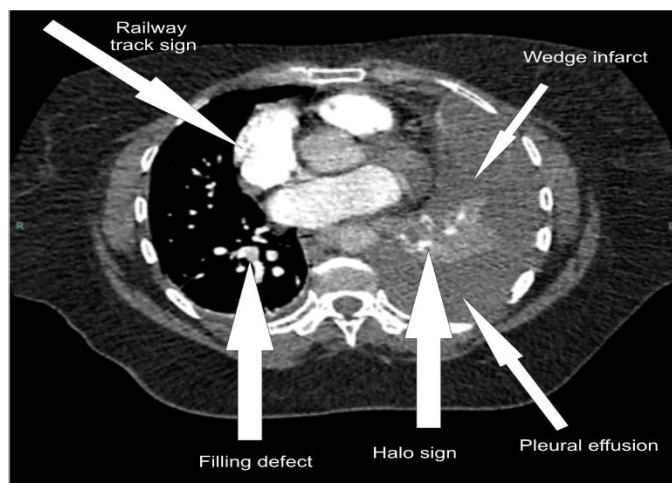


Figure 2

DISCUSSION

This report of pulmonary embolism in a middle-aged woman with no previous history of deep venous thrombosis emphasises that the assumption of perioperative coagulation safety, which was standard practice in the past, is fraught with risks [1,2].

The combination of middle age, prolonged immobility, and major surgery must be recognised as moderate risk factors for embolism and therefore warrants prophylaxis, such as the use of intermittent pneumatic compression and elastic stockings [3]. The importance of surgery as a thromboembolic risk factor must be recognised.

Factors responsible for the assumption of perioperative coagulation safety in Africa include limited access to, and high costs of, diagnostic testing for coagulopathies; reliance on clinical judgement; high prevalence of infections with subsequent chronic inflammation and acquired coagulopathies; shortage of trained specialists; and systemic factors such as high patient-to-nurse ratios and lack of standardised, compliant, and widely used pre-operative protocols [4,2].

Measures to improve perioperative coagulation safety include routine preoperative risk assessment for coagulation disorders, preoperative testing to identify coagulopathies, ensuring the availability of essential medications for treating coagulopathies and bleeding, and educating healthcare providers in specialised coagulopathy management [5,6].

CONCLUSION

The risk of coagulation disorders must be assessed preoperatively, and preventive measures should be instituted in every patient.

Conflicting Interest: Nil

Authors' Contributions

CCO, EK, and UK managed the patient in the clinic. UK drafted the manuscript, designed the study, and conceived the study. CCO participated in the study design and coordination and helped to draft the manuscript. All authors approved the final manuscript.

REFERENCES

1. Mouton JP, Blockman M, Sekaggya-Wiltshire C, Semakula J, Waitt C, Pirmohamed M, Cohen K. Improving anticoagulation in sub-Saharan Africa: what are the challenges and how can we overcome them? *Br J Clin Pharmacol*. 2021 Aug;87(8):3056-3068.
2. Obeagu EI. Elderly coagulation risk in a globalized world: burden, biomarkers, and management in Africa: a narrative review. *Ann Med Surg (Lond)*. 2025 Sep 30;87(11):7457-7462.
3. Uwanurochi K, Mike E. Balancing perioperative coagulation risks: a case report. *Yen Med J*. 2025 Dec 5;6(1):15-22.
4. Obeagu EI. Clinical outcomes of coagulation disorders in elderly Africans: a review of risk, diagnosis, and management. *Ann Med Surg (Lond)*. 2025 Dec 19;88(2):1613-1618.
5. Biccard BM; African Peri-operative Research Group (APORG) working group. Priorities for peri-operative research in Africa. *Anaesthesia*. 2020 Jan;75 Suppl 1:e28-e33.
6. Kozek-Langenecker SA. Perioperative coagulation monitoring. *Best Pract Res Clin Anaesthesiol*. 2010 Mar;24(1):27-40.

Original Article

HEPATITIS B PREVALENCE AND RESPONSE RATE TO COUNSELING AMONG WOMEN OF CHILD-BEARING AGE IN THE FEDERAL CAPITAL TERRITORY, ABUJA, NIGERIA: A RETROSPECTIVE STUDY

Saliu OA¹, Alagamba JC¹, Edogbo B¹, Adegbor EC², Olokoba OE³, Idowu OA^{1*}

¹Department of Environmental Health Science, Faculty of Health Sciences, National Open University of Nigeria, Abuja, Nigeria

²Department of Public Health, Faculty of Health Sciences, National Open University of Nigeria

³Department of Nursing, Faculty of Health Sciences, National Open University of Nigeria

***Corresponding author:** Oluwafemi Ayodeji Idowu; aidowu@noun.edu.ng, Id4phemy@gmail.com

Abstract

Background: Hepatitis B is a chronic infectious disease caused by the Hepatitis B virus (HBV), which primarily damages the liver. This study assessed the prevalence and awareness of hepatitis B among women of childbearing age and their responses to counseling in the Federal Capital Territory (FCT), Abuja, Nigeria.

Methods: The study is a retrospective cross-sectional study of three (3) health facilities (A, B, and C) in the largest area council of the FCT from 2020 to 2022. The study included 859 women of childbearing age (18-49 years), and data regarding socio-demographic characteristics, HBV infection prevalence, and counseling sessions were gathered and analyzed by SPSS version 20 using descriptive statistics.

Results: The findings revealed that the prevalence rate of HBV infection among the women from the health facilities over three years (2020-2022) was 11.76%, with the highest prevalence in women aged 18-30 years. Seventy percent (n = 602) of the women across the facilities had formal education, 28% were aware of the disease, and 27% (n=27) of the infected women responded positively to counseling.

Conclusion: The prevalence of hepatitis B among women of childbearing age in the health facilities was high. The high level of formal education among the women did not translate into adequate awareness of HBV or a response to counseling, underscoring the need to promote effective hepatitis B awareness campaigns and introduce strategies that will encourage counseling to mitigate the burden of hepatitis B and help achieve the WHO's objective of eliminating the virus by 2030.

Keywords: Hepatitis B, prevalence, awareness, counseling, childbearing women, Abuja

Cite this article: Saliu OA, Alagamba JC, Edogbo B, Adegbor EC, Olokoba OE, Idowu OA. Hepatitis B prevalence and response rate to counseling among women of child-bearing age in the Federal Capital Territory, Abuja, Nigeria: a retrospective study. Niger Delta J Med Med Res. 2026;5(3):96–103.

INTRODUCTION

Hepatitis B is a liver disease of particular concern, especially for women of childbearing age [1]. The disease manifests after the hepatitis B virus (HBV) invades the human body. The virus enters liver cells called hepatocytes and replicates its DNA many times in the nucleus, thereby destroying liver tissue and causing cirrhosis and liver cancer [2]. Routes of HBV transmission include unprotected sexual intercourse,

improper use of needles, and blood transfusions, among others [3].

HBV can persist in the human body for over 30 years without clinical symptoms after infection [1]. A distinct geographical distribution of HBV genotypes and subgenotypes has been reported [4-6]. In sub-Saharan Africa, hepatitis A, D, and E are the predominant HBV genotypes, while B and C HBV genotypes are highly endemic in West Africa, with a record