

Complexities Associated with the Management of Eclampsia in a Resource-limited Setting: A Case Report



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BACKGROUND

Maternal morbidity and mortality persists as a public health challenge in Ghana, with hypertensive disorders being a primary contributor (1). At Korle-Bu Teaching Hospital (KBTH), a major referral center in Accra, eclampsia represents a frequent and severe manifestation of these disorders.

In 2022, 108 cases of eclampsia were recorded out of 1,304 hypertensive disorders (2). Though the incidence has reduced, mortality remains high. This case report highlights the challenges encountered in the management of a patient with eclampsia



Figure 1. Marked lingual edema resulting in near-complete airway obstruction.



Figure 2. Intubated patient exhibiting clinical features predictive of a difficult airway.

CASE DESCRIPTION

A 36-year-old pregnant woman in labour was referred with recurrent convulsions and respiratory distress. After stabilization with magnesium sulphate and oxygen, urgent caesarean section was indicated. Pre-anaesthetic evaluation revealed an obese patient (BMI – 40.2kg/m²), GCS-14/15 with massive tongue swelling, bleeding, and severe airway compromise. She also had oedema, haematuria, and moderately elevated blood pressure. Urgent laboratory investigation results delayed and point-of-care testing was lacking.

Preparations included IV fluids, blood products, and stand-by otolaryngologist. Sodium citrate and ranitidine were not available. Two senior anaesthetists managed induction with halothane, suctioning, and cricoid pressure. Intubation was arduously achieved with bougie-guided placement, and caesarean section proceeded uneventfully.

The patient was transferred intubated to the Surgical High Dependency Unit (HDU) 300 metres away. Initially stable, she deteriorated on day three with respiratory failure and oliguria. Chest X-ray revealed bilateral infiltrates; she died before further diagnostic confirmation. Autopsy was requested but not done.

DISCUSSION

This tragic case of maternal mortality from eclampsia underscores the complexity of management of obstetric emergencies within resource limited settings. The patient's death demonstrated the deficiencies and systemic gaps present.

LEARNING POINTS

Key lessons include the need for:

1. Dedicated HDU facilities in obstetrics units.
2. Point-of-care testing.
3. Difficult airway trolleys and crash carts in obstetric theatres.
4. Multidisciplinary care in obstetric critical care.

Strengthening these systems is essential to improving maternal outcomes in Ghana and comparable low- and middle-income countries.

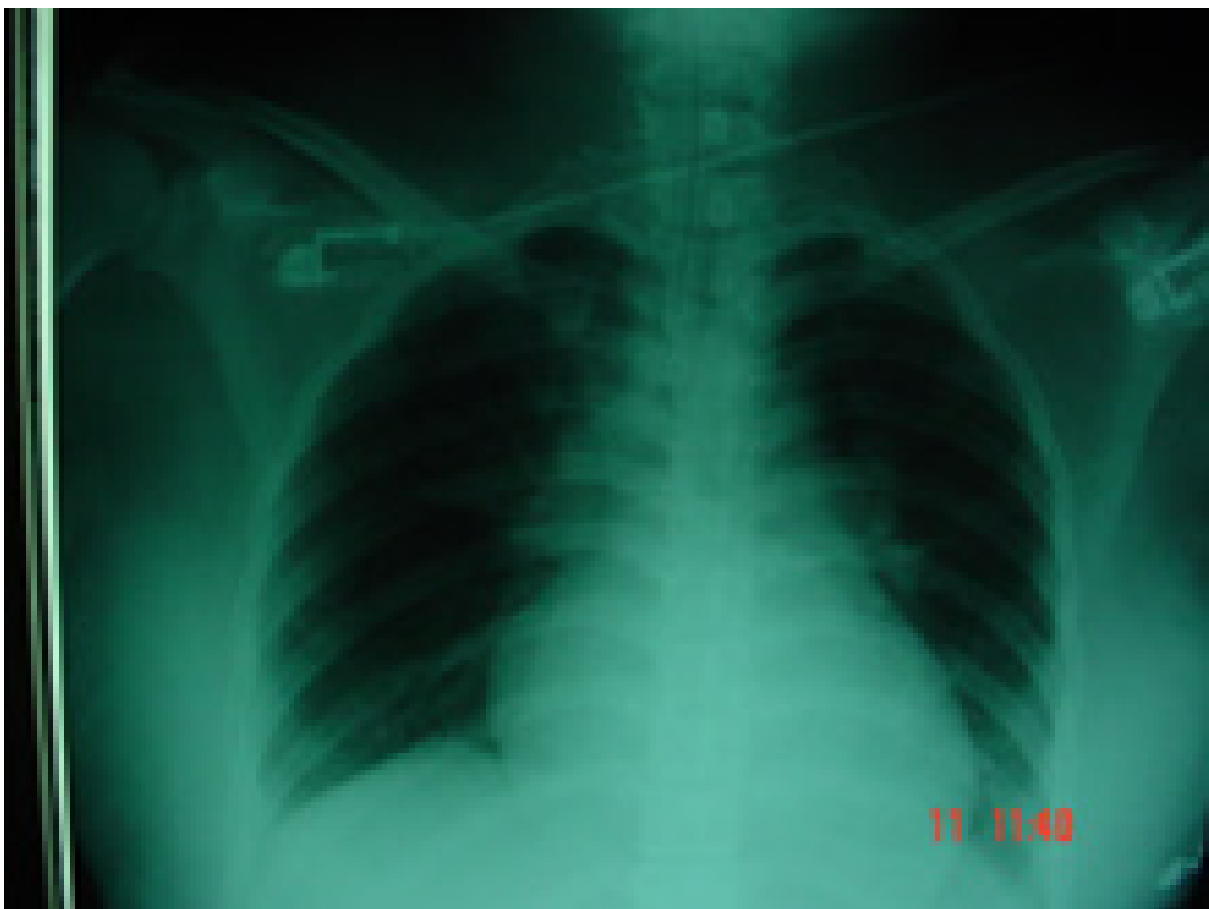


Figure 3. Preoperative chest x-ray



Figure 4. Postoperative day 3 chest x-ray demonstrating bilateral pulmonary infiltrates.

REFERENCES

1. Ghana Health Service. Annual Report 2022. Accra: GHS; 2023.
2. Obstetrics Department, KBTH. Biostatistical Data 2022 (Unpublished Data)