

Lassa Fever in Pregnancy Resulting in Maternal Mortality: A Report of Two Cases

Samuel Okwuchukwu Ilikannu¹, Sunday Emmanuel Jombo¹, Ifeanyi Jude Ofuani², Angelica Chinecherem Uwaezuoke^{&1}, Christian Igibah¹, Chikodili Ogugua Ilikannu³, Chidinma Onwuasoeze⁴, Chinonye Sandra Osakwe¹, Princess Chinelo Igboejesi¹, Hillary Onome Onomuighokpo¹

¹Department of Obstetrics and Gynaecology, Federal Medical Centre, Asaba, Delta State, Nigeria

²Department of Urology, Federal Medical Centre, Asaba, Delta State, Nigeria

³Department of Health Systems Management, School of Public Health, University of Port Harcourt, Rivers State, Nigeria

⁴Department of Paediatrics Surgery, Leeds Teaching Hospital, United Kingdom

Introduction

- Zoonotic Viral Haemorrhagic Fever (VHF) endemic to West Africa
 - Hidden and **significant** cause of maternal mortality
 - Has a three-fold risk of maternal and perinatal mortality (abortions, IUFD)
 - Symptoms mimic other febrile conditions and obstetric complications (eclampsia, sepsis, obstetric haemorrhages)
 - High viral load result from missed or delayed diagnosis, the virus’s affinity for foetal vascular and placental tissues and mother’s weak immunity
- High viral load affects outcome
 - Diagnosis is made via the Reverse-transcription Polymerase Chain Reaction (PCR), Immunofluorescent Antibody or Enzyme-linked Immunosorbent Assay (ELISA) techniques
 - This poster presents two cases of maternal Lassa fever managed at Federal Medical Centre, Asaba

Case Presentation

- Both cases demonstrate rapid progression and poor maternal-fetal outcomes
- Symptoms at presentation and bedside tests raised a suspicion of VHF
- Required multidisciplinary care
- Mortality was inevitable

TEST	VERY LOW	LOW RANGE	HIGH RANGE	VERY HIGH	VALUE	NEGATIVE/POSITIVE
UREA		1.7	8.0		21.8 mmol/l	
CREATININE		72	127		631 mmol/l	
SODIUM		130	146		131 mmol/l	
POTASSIUM		3.3	5.0		6.0 mmol/l	
CHLORIDE		90	108		88 mmol/l	
BICARBONATE		20	32		18 mmol/l	

PARAMETER	CASE 1	CASE 2
AGE / PARITY	46-year-old multigravida (G7 P6+0 A5)	33-year-old multiparous woman (P2 A1)
BOOKING STATUS	Unbooked	Unbooked
GESTATIONAL AGE (GA)	22 weeks GA	31 weeks GA
PRESENTATION	Unconscious (GCS: 5/15), Convulsions and fever - Vaginal, petechial, orificial & puncture site bleeding	- Unconscious (GCS: 9/15) - Convulsions and fever
FETAL STATUS	Absent fetal heartbeat (bedside scan)	Stillbirth at referring facility
INITIAL REFERRAL	Suspected maternal complications	Referred as case of postpartum eclampsia
CONTACT HISTORY	Unknown	Positive history of contact with Case 1
INVESTIGATIONS	- Positive Lassa-PCR - Bedside bleeding time > 30 minutes - Abnormal kidney function tests	- Positive Lassa-PCR - Leukocytosis (WBC > 52,700 cells/mm ³)
TREATMENT	Supportive care	Two doses of Ribavirin (ISTH regimen) + fresh blood transfusion + supportive care
OUTCOME	Disseminated Intravascular Coagulation (DIC), Hypovolemic shock, Cardiac arrest and death within 30 minutes	Died with 12 hours of admission

Clinical Discussion

DIAGNOSTIC CHALLENGES

- High index of suspicion (non-specific symptoms)
- Late presentation to healthcare facilities
- Time-consuming diagnostic tests delay definitive diagnosis
- Limited availability of Ribavirin
- Challenges with effective contact tracing and isolation (stigma/fear)

Preventing Lassa Fever Deaths in Pregnancy



Antenatal care



Prompt hospital care



Infection prevention and control



Regional collaboration



Rodent control

Conclusions and Recommendations

- PREVENTION IS KEY
- Community health education and increased surveillance
 - Screen for Lassa fever, if unresponsive to antimalarials/antibiotics after 48hrs
 - Conservative management for mild cases with continuous maternal/foetal monitoring
 - In severe cases, deliver foetus to enhance maternal outcome
 - Precautionary measures by health workers cannot be overstated!