Excretion Of Lassa Fever Virus In Breast Milk And The Management Of The Breastfeeding Infants: Case Series

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Introduction

• Lassa fever is a viral hemorrhagic fever endemic in West Africa and a cause of major epidemic outbreaks

• Different modes of transmission have been reported such as rodent to human and from humans --to- human

• Human-to-human transmission is less common than rodent to human transmission and occurs via direct contact with blood, tissue, secretions, or excretions of an infected individual
Introduction contds.

• Excretion of Lassa virus in breast milk of lactating infected mothers and such medium being a possible mode of transmission have not been fully reported in literatures

• Guidelines for the clinical management of Lassa fever cases have not in-cooperated the management modalities of breastfeeding infants whose mother are suffering from Lassa fever disease.
AIM AND METHODOLOGY

• We report three cases of breastfeeding mothers who were positive to Lassa fever (both serum and breast milk) and the management modalities for the breastfeeding infants

• Case series involving retrospective review of case notes of both infected mothers and the children and experienced gained during managing these patients
CASE 1

• 18 year old teacher, serum and breast milk confirmed Lassa PCR Positive
• Mother to a 6 month old breastfeeding male child.
• Lassa PCR result for child was negative and vital signs of child remained normal
• However, child was admitted, monitored, had a full course of ribavirin and antibiotic therapy and weaned from breast milk
Case 1 condts.

• Child was discharged after 10 days of admission. Serum Lassa PCR result of mother became negative after 35 days and breast milk could not be concluded but was still positive after 20 days.

CASE 2:

• 44 year old trader, serum was confirmed Lassa PCR positive but breast milk could not be confirmed because of shortage of reagents in the reference laboratory
Case 2 condts.

• Child was a 20 month old breastfeeding male with normal vital signs, serum Lassa PCR result negative
• He was weaned off breast milk and monitored closely (without admission)
• Mother was discharged after full course of ribavirin and antibiotic and became negative of serum after 37 days
CASE 3:

• 28 year old applicant, serum and breast milk confirmed Lassa PCR Positive, mother to a 6 week old breastfeeding female child

• Child became irritable, crying excessively, did not tolerate orally and febrile (38.3)

• Lassa PCR result for child was confirmed positive.
Case 3 condts.

• Child was admitted, monitored, had a full course of ribavirin and antibiotic therapy and weaned off breast milk during the period the mother’s breast milk was positive.

• Mother became serum negative on day 7 of ribavirin therapy and breast milk negative on day 17th. Child was recommenced on breastfeeding after mother’s breast milk turned negative and discharged after 19 day of admission.
Steps to management

• Stop breastfeeding and commerce artificial feeds
• Send breast milk for Lassa PCR testing
• Admit child for observation or treatment depending on age and level of exposure
• Send infant sample for Lassa fever testing and other investigations
• Review with investigation results
CONCLUSION AND RECOMMENDATION:

• Lassa fever virus is now reported to be excreted in breast milk and is a mode of transmission from human to human

• Management modalities for infants of Lassa positive mothers will depend on:
  
  • Age of the child  
  • Presence or absence of Lassa virus in the breast milk  
  • Presenting symptoms of the child  
  • There is need to have an SOP for clear cut management modalities for children of infected positive Lassa mothers.