

Hemorrhagic pericardial effusion in Lassa virus disease in children: A report of three cases

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Introduction

Lassa virus disease (LVD) is a viral hemorrhagic illness with varied manifestations. Polyserositis has been identified as a manifestation of LVD, including pleural effusion and effusive pericarditis, especially in adults. We report three cases of hemorrhagic pericardial effusion to heighten the index of suspicion for Lassa pericarditis, enhance prompt diagnosis and treatment among children presenting with bloody effusive pericarditis, especially in Lassa fever endemic areas.

Methods

The clinical notes of three male patients who presented with bloody effusive pericarditis over a one-year period were retrieved. Their presentations, laboratory findings, treatment and outcome were outlined.

Results

The cases were 3 male children (Cases 1, 2 and 3) aged 13, 9 and 15 years seen between January and December 2024. The clinical presentations, examination findings, and investigations were in keeping with acute and post-infectious hemorrhagic pericardial effusion due to LVD after the common causes of hemorrhagic pericardial effusion in our environment were ruled out. Case 2, surprisingly, had a positive polymerase chain reaction (PCR) test

of the hemorrhagic pericardial effusion but a negative serum PCR test. All three cases recovered fully and were seen in the outpatient clinic 2 weeks after discharge in good health.

Conclusion

Effusive pericarditis in LVD can mimic effusive pericarditis by other etiologic agents, so, LVD should be a differential diagnosis in any child with hemorrhagic pericardial effusion, especially in Lassa endemic regions. A high index of suspicion, prompt diagnosis and treatment of these cases will reduce morbidity and mortality.