Ribavirin as a post-exposure prophylaxis agent in Crimean Congo hemorrhagic fever

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Abstract

Background: Crimean-Congo hemorrhagic fever (CCHF) is a severe viral illness with high mortality rates. Nosocomial transmission poses a significant risk to healthcare workers (HCWs). Materials/methods: In this study, we evaluated the effectiveness of ribavirin in post-exposure prophylaxis (PEP) among HCWs with high-risk contacts. Exposures are grouped into 3 categories. The high-risk group consisted of HCWs who were directly exposed to blood or bodily fluids. We also included HCWs who participated in CPR without wearing appropriate PPE to the high-risk group. The moderate-risk group consisted of HCWs without a visible exposure to blood or bodily fluids but handled patient without appropriate PPE. Results: At least 38 HCWs had contact with the index fatal patient. None of the HCWs who had contact with the patient had appropriate PPE. Patient's PCR and IgM were positive for CCHF. Among all known contacts, all HCWs in high and moderate risk groups (n:24) received PEP with ribavirin. No moderate or severe side effects were observed due to ribavirin. None of the HCWs developed nosocomial CCHF. Conclusions: There are still life-threatening gaps in the compliance of the HCWs to standard precautions. Ribavirin seems an effective and well tolerated agent for PEP of nosocomial CCHF.

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