



Identification of Foot and Mouth Disease Virus

Hecheng Ma*

Department of Virology, University of Chinese Academy of Sciences, Shenzhen, China

ABOUT THE STUDY

Foot-and-mouth disease (FMD) is a highly contagious, economically and politically important cross-border animal disease that affects all ungulates in particular. Cows, pigs, goats, sheep, and many wild artiodactyls. Five of the seven serotypes of the FMD virus (O, A, C, SAT1, SAT2, SAT3, and Asia 1) (O, A, C, SAT1, SAT2) are endemic to Ethiopia. However, only limited information on the current FMD status and circulating serotype is available in the country. Therefore, this study was conducted to isolate and molecularly identify the FMD virus using a panel of virological detection assays.

Foot-and-Mouth Disease (FMD) is one of the major cross-border animal diseases that cause serious economic losses due to the high prevalence and export trade restrictions imposed on affected countries. The economic crisis caused by FMD is unbalanced in many situations around the world due to the vastly different illnesses. Endemic and non-endemic foot-and-mouth disease in both developed and developing countries. Livestock income in Africa, China and India is most affected by FMD, with direct production losses and vaccination losses of approximately US \$ 2.32 billion in Africa alone.

In general, the rate of FMD infection can be affected primarily by factors such as animal species, animal breeds, host immune status, and viral infection titers. There is no doubt about the prevalence of disease in all susceptible animals exposed to FMD100. However, mortality varies by species and age. It is 5% to 94% for lambs, 80% for some groups of calves, 100% for piglets and 1-5% for most adults. The disease is characterized by fever, excessive salivation, and blisters on the tongue, especially in small ruminants, but clinical symptoms are often mild in some viral strains. The disease

is endemic to most countries in sub-Saharan Africa, with six of the seven serotypes predominant and the virus circulating between wild hosts and livestock. Five of the seven serotypes of FMD (O, A, C, SAT2, SAT1) are endemic to Ethiopia. Currently, there is no government strategy in Ethiopia to combat FMD through vaccination and motor control.

Primarily, suspected virus specimens were grown and characterized in sensitive cell cultures (such as BHK21). This is important for establishing geographic relationships between isolates, genetic variation, and molecular evolution of the virus in carriers. In outbreaks, it is also important to identify the relationship between the cause of the infection and the vaccines available for protection. This helps in planning national management and prevention programs. The disease is endemic to most countries in sub-Saharan Africa, with six of the seven serotypes found and the virus circulating between wild hosts and livestock. Ethiopia has many livestock, including both livestock and wildlife. In Ethiopia, foot-and-mouth disease is one of the most socio-economically important livestock diseases. With the exception of some exotic dairy cow herds, FMD is poorly controlled domestically as it has not been vaccinated for prophylactic purposes.

Finally, build diagnostic, epidemiological and economic capacity to maintain information on the mode of FMD epidemic, regular monitoring and monitoring and characterization of sub serotypes / strains for selection of appropriate vaccine strains. , Freeing areas that believed in control of livestock movement during outbreaks from infection, restrictions on cross-border movement of animals, and the establishment of quarantine stations are very important for applicable FMD control measures.

Correspondence to: Hecheng Ma, Department of Virology, University of Chinese Academy of Sciences, Shenzhen, China, E-mail: chengma@gmail.com

Received: 02-Jan- 2022, Manuscript No. JIDD-22-13660; **Editor assigned:** 05-Jan-2022, PreQC No. JIDD-22-13660(PQ); **Reviewed:** 19-Jan-2022, QC No JIDD-22-13660; **Revised:** 26-Jan-2022, Manuscript No. JIDD-22-13660(R); **Published:** 31-Jan-2022, DOI: 10.35248/2576-389X.22.07.164

Citation: Ma H (2022) Identification of Foot and Mouth Disease Virus. J Infect Dis Diagn. 7:164.

Copyright: © 2022 Ma H. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.