

Severe Fever with Thrombocytopenia Syndrome

Masayuki Saijo

Editor

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 Springer

Editor
Masayuki Saijo
Department of Virology 1
National Institute of Infectious Diseases
Tokyo, Japan

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Preface

Severe fever with thrombocytopenia syndrome (SFTS) was reported to be a novel bunyavirus infection by the Chinese scientists in 2011. SFTS is a tick-borne virus infection with high case fatality, and its vectors playing a role in transmitting the causative agent, SFTS virus (SFTSV), are *Haemaphysalis longicornis* and others. To tell the truth, I could not imagine that SFTS was endemic to Japan, when I received the information on the discovery of SFTS in China, even though I knew the evidence that *Haemaphysalis longicornis* was prevalent in Japan.

In autumn, 2012, a woman aged 50s died of multiorgan failure with unknown etiologies. She was retrospectively diagnosed as having SFTS by isolation of SFTSV from the serum specimen and identification of SFTSV antigen in the tissue specimens through the postmortem examination in Japan. The discovery of SFTS patient in Japan indicated that SFTS was also endemic not only to China but also to Japan. SFTS patient was also identified in South Korea as well.

SFTSV is circulating in nature in some regions of mainland China, Korean peninsula, and Japan through the lifecycle between mammals and some species of ticks. The evidence indicates that SFTS has occurred since the past and will continue to occur in the future. We cannot escape the risk being infected with SFTSV. We should study the epidemiology, pathology, and clinical aspects of SFTS more. Basic research on SFTSV and its associated areas is also important. Furthermore, specific antiviral therapies for and the vaccines against SFTS should be developed.

I have studied Crimean-Congo hemorrhagic fever (CCHF) in collaboration with the Chinese scientists in the Chinese Centers for Disease Control and Prevention (China CDC) for a long time. Based on the experience of studying CCHF, I have noticed that there might be many similarities in the disease characteristics between SFTS and CCHF. The studies on SFTS might contribute to those on CCHF, and vice versa.

I believe that we would be able to reduce the number of fatal SFTS patients through further studies including the development of specific antiviral therapies for and effective vaccine against SFTS.

Seven years only have passed since the first report on the discovery of SFTS in 2011. Although the time of the discovery of SFTS to date is short, the summarization of the recent knowledges on SFTS reported at this stage may help us to understand the entire nature of and our study direction for SFTS.

I deeply thank all the contributors of each chapter. I also deeply thank Ms. Kripa Guruprasad, Project Coordinator for Springer Nature.

I wish to dedicate this book to and hope to contribute for all patients with SFTS.

Tokyo, Japan

Masayuki Saijo

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