Biosafety for Management of Skin Eruptions Caused by Telaprevir in Hepatitis C virus Genotype 1a-Infected Patients

Naoki Oiso* and Akira Kawada
Departments of Dermatology and Patient Safety & Management, Kinki University Faculty of Medicine, Osaka-Sayama, Osaka, Japan

Vaccination to a number of persons with a same needle was not rare in Japan before reporting many cases with non A non B hepatitis. Hepatitis C virus (HCV) was identified as the most causative virus of non A non B hepatitis. HCV infection was previously caused by vaccination and blood transfusion without qualified pre-examination. HCV infection is currently caused by improper piercing, tattooing and injection of narcotics as abuse.

HCV may induce chronic hepatitis, liver cirrhosis and hepatocellular carcinomas (HCC). Combined therapy of peg interferon and ribavirin has shown to be effective for HCV genotype 1a-infection, but recurrence after the combined therapy may occur. Traditional therapy with pegylated interferon and ribavirin combined with the novel protease inhibitors telaprevir or boceprevir has recently shown improved outcomes in HCV-infected patients. The therapy has achieved high sustained virological response. Triple therapy with telaprevir, peg interferon and ribavirin was approved by the Ministry of Health, Labor, and Welfare of Japan in November, 2011 in the institutes with team therapy among board-certified hepatologists and dermatologists.

Triple therapy with telaprevir, peg interferon and ribavirin is mainly discontinued by anemia, skin eruption and nausea/vomiting. The therapy may induce severe life-threatening eruptions, toxic epidermal necrosis, Stevens-Johnson syndrome, and drug-induced hypersensitivity syndrome (drug reaction with eosinophilia and systemic symptoms syndrome). Japanese Dermatological Association states that the triple therapy should only be allowed to the core approved educational hospitals where board-certified dermatologists with ability of emergent medicine are employed.

The corporation between board-certified hepatologists and dermatologists gives excellent outcome. It is required for dermatologists to evaluate eruptions, to referee continuance or discontinuance of the therapy, and to treat the eruptions if they recommend continuance. The adequate management for skin eruptions provides more appropriate situation for patients taking the triple therapy. The team therapy with corporation between board-certified hepatologists and dermatologists has achieving high ratio to complete the triple therapy in our institute.

The innovation of treatment for HCV would reduce the death ratio of liver cirrhosis and HCC because of elimination of HCV from infected individuals. It is our pleasure to bring cheerful prospects in HCV-infected persons.