Hepatitis C virus – An overview for dental health care providers

As a healthcare professional, meeting and treating a variety group of people is part of our daily job. At the same time, germs are quietly being exchanged between persons without any signs. For this reason, a health care provider should understand, and take precautions to prevent the transmission of harmful microbes between patients and ourselves.

There are many groups of diseases transfer in different channels, blood-borne pathogens are one of these groups. Among the blood-borne pathogens, Hepatitis C virus (HCV) is one of the pathogens like Human immunodeficiency virus, until this day, no vaccine is able to stop them from replicating in the human bodies once entered. In the article “Hepatitis C virus – An overview of dental health care providers” the authors identified in details the characteristic, transmission route, screening, diagnosis and treatment of HCV. Most importantly, prevention for transmitting the disease is the key.

HCV is a chronic disease that affects the liver functions. The patient may experience jaundice, elevated liver function test results, and in long term, 1 out of 3 patients may progress to liver cirrhosis. In 1 to 3 percent of these infected patients, it will develop to hepatocellular carcinoma which may lead to death. HCV is an RNA virus which is difficult to treat because it changes its heterogeneity frequently among patients. As a result, vaccination cannot be developed due to its diversity. Since it is part of the blood-borne pathogens, HCV is transferred through blood and bodily fluid. Parenteral injection is the most common route of transmission. Thus, the risk factor of exposure to the virus in the US mainly through injection drug use, as well as reusing of syringes. For healthcare professionals, one of the possible exposures would be accidental needle sticks.

HCV can live in tough situations such as a moist and low temperature environment for up to five months. It can survive for 16 hours even in dry environments. The incubation period after exposure is from 2 weeks up to 6 months before encountering any symptom. Symptoms include nausea, anorexia, fever, malaise, or abdominal pain. However, the symptoms are not severe enough that the patient will check with their physician immediately, which leads to many undiagnosed cases.

There are ways to limit contact of the diseases. They include thoroughly disinfect all the surface counters and everything we touch in the dental office. The commercial hand sanitizers and disinfectants that kill hepatitis B virus also kill HCV effectively. In the end, a healthcare professional must follow the standard precautions. The components include hand hygiene, personal protective equipment, proper use of equipment and drug delivery systems, and respiratory hygiene and cough etiquette. It is the most important practice for us working in the medical field. This is the barrier between the diseases and us, and the protection between the patient and us.

Part 2

Hepatitis C virus, just like the HIV and other infectious diseases, is an important topic that cannot be neglected by health care providers or DHCPs. It is inevitable that we encounter the different types of diseases in a dental setting without warning. We must be strict in practicing standard precautions. All the tools we touch or use must be sterilized, and all surface areas should be disinfected between patients. We are responsible for the well-being of the patients who sit in our chairs, as well as everyone around us. I will always keep in mind that this is part of my responsibilities whether I see patients in school clinic or elsewhere in the future. I will gladly share all I learn from this article to my patients if they have inquiries including the absence of vaccination for HCV, but it is preventable if we have good personal hygiene, and take standard precautions when we take care of our patients. I will recommend this article to other dental hygienists because we are very likely to treat all type of patients who may be a carrier of different diseases.