Nosocomial infection and anesthesiologist

Viroj Wiwanitkit*
Visiting Professor, Hainan Medical University, China

Nosocomial infection is an important problem in medicine. This problem sporadically occurs in hospital setting and considered unwanted event in medical care. To manage the nosocomial infection, good infection control is needed. The nosocomial infection can occur in any medical work including to anaesthesia work. Lotfu et al. noted that “Potentially pathogenic, multidrug-resistant bacterial organisms are transmitted during the practice of general anaesthesia to both the anesthesia work area and intravenous stopcock sets [1].” Implementation of infection control measures in this area is needed. It is no doubt that such control measure can effectively reduce “both the evolving problem of increasing bacterial resistance and the development of life-threatening infectious complications [1].” The basic knowledge on the infection control is necessary for any anesthesiologist. According to a recent survey, et al. found that “respondents showed good adherence to practices of nosocomial infection prophylaxis and to improve them educational multidisciplinary campaigns are necessary [2].” It seems that the anesthesiology has good knowledge and practice regarding infection control.

Nevertheless, there are also some reports on the nosocomial infections due to the anesthesiologist. The good example is the nosocomial meningitis. Suy et al. reported an interesting referencing case of “nosocomial meningitis due to Streptococcus salivarius linked to the oral flora of an anesthesiologist [3].” This is a good lesson learnt. From a single anesthesiologist who fail to practice according to standard infection control guideline, the clusters of nosocomial meningitis are the unwanted result [4]. Another important example is the cluster of hepatitis C infection originated from an anesthesiologist [5]. Stark et al. reported “Acute hepatitis C occurred in three patients who had undergone gynecologic surgery in an outpatient clinic on a single day [5].” In that situation [5], epidemiologic and molecular evidence confirm the problem.

Carelessness and human error is believed to be the main factor contributing to the problem. In any medical center, there should be specific work instruction regarding infection control and nosocomial prevention regarding anaesthesiology practice. Schulz-Stübner et al. noted that “Data on risk factors would allow anesthesiologists to develop evidence-based guidelines for placement and care of catheters used for regional anesthesia. A multicenter surveillance system may develop evidence-based guidelines for placement and care of catheters used for regional anesthesia. A multicenter surveillance system may contribute to the prophylaxis of infection in the surgical patient. Rev Bras Anestesiol 59: 756-766.” Of any preventive procedures, the simple practice on handwashing is confirmed for effectiveness in reducing risk of nosocomial infection [7]. Fukada et al. noted that instructing anesthesiologists in handwashing against bacterial contamination is required [7]. In addition, good cleansing of all anesthesia tools is very important. Many tools directly deal with respiratory tract and it might pose the risk for further transmission of airborne disease such as tuberculosis [8]. Focusing on tuberculosis, the risk of the nosocomial infection is not only for patients but also the anesthesiologist [8].

Whereas the main role of anesthesiologist is on anesthesiaology, the similar important role on infection control should not be forgotten. As concluded by Ferreira et al., “The anesthesiologist is the professional who should intervene in the intraoperative period with simple measures to optimize the care of surgical patients and to reduce the incidence of infections [9].”

Conflict of interest
None

References