

Accidental Hand Injury with Scalpel in the Operating Room: Do the Differences Between Desflurane with Sevoflurane Vaporizers have a Preventive Effect?

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To the Editor

The world pandemic of acquired immunodeficiency syndrome (AIDS) has focused enormous attention on the problem of accidental sharps injuries sustained by health care workers (HCWs) [1]. It is well known that anesthesiologists, among HCWs are at high risk for acquiring blood-borne infections through contact with blood or body fluids and the greatest risk of transmission is through a percutaneous exposure such as needlestick injury [2-5]. In addition to practising universal precautions anesthesiologists can attempt to reduce their risk of injuries. For this reason we aimed to show the differences between desflurane and sevoflurane vaporizers which may be seen as a protective measure for such injuries.

The main differences that distinguishes desflurane vaporizer from sevoflurane vaporizer; desflurane vaporizer uses electricity, offers refillment while the vaporizer is open and offers 1-12% volume of desflurane flow [6]. Besides the desflurane vaporizer is commanded from above and sevoflurane vaporizer commanded from the front.

In anesthesiology practice as a habit although not proper we place adhesive tapes for endotracheal tube fixation or scissors or scalpels which we use for cutting dressings on these vaporizers with their covers. When we forget to place them without their cover, this leads to injuries due to vaporizers operation style. Desflurane vaporizers adjustments are done from above and these types of injuries are mostly happens from the scalpels which placed on desflurane vaporizers (Figure 1, 2). By the time we realized the presence of scalpel on the desflurane vaporizer our hand was grabbing the vaporiser from above for adjusting. In our opinion the construction that offers the adjustment from front side is the reason that this kind of injuries are seen more less with the sevoflurane vaporisers.



Figure 1: Desflurane vaporizer.



Figure 2: Sevoflurane vaporizer.

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