



Hypnotic potency differs between desflurane and sevoflurane

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To the Editor:

With interest, we read the study by Kanazawa et al. [1]. They compared electroencephalographic finding between 1 MAC of desflurane and sevoflurane in three different age groups. Both bispectral index (BIS) and 95% spectral edge frequency were significantly lower in desflurane than sevoflurane group, suggesting that the potency of desflurane on the brain is greater than that of sevoflurane at 1 MAC. They conducted study under no surgical stimulation. Recent two trials provided further information under uniform stimulation [2, 3]. One study compared BIS and surgical pleth index (SPI) between desflurane and sevoflurane under a uniform tetanic stimulation by nerve stimulator [3] and found that both indexes are significantly lower in desflurane group, suggesting that the cerebral effect of volatile agents may differ at 1 MAC. Another study compared the remifentanyl requirement to maintain an equal SPI under the same surgical stimulation of dissection of the gall bladder between desflurane and sevoflurane [2]. The remifentanyl requirement was significantly lower in desflurane group. All three studies reported consistent results that the potency of desflurane is greater than sevoflurane. Further studies are warranted to evaluate the mechanism.

Compliance with ethical standards

Conflict of interest No competing interest declared.

References

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