

## Sevoflurane in patients at risk of ventricular dysrhythmias

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To the Editor:

I read with interest the paper by Terao et al. [1] that did not find QT prolongation in patients receiving propofol and sevoflurane during induction of anesthesia. However, it is probably more the consequence of low sevoflurane concentrations during induction than a ‘counteract’ effect of propofol on the electrophysiological effects of the volatile agent as stated by the authors. In fact, all volatile agents, including sevoflurane, prolong the QT interval due principally due to the inhibition of  $I_{\text{HERG}}$  at clinical concentrations [2]. This inhibition of  $I_{\text{HERG}}$  is involved in drug-induced torsades de pointes [3]. Propofol does not have an inhibitory effect on  $I_{\text{HERG}}$  [4]. Thus, it is pharmacologically very improbable that propofol could counteract the cardiac effects of sevoflurane. Even if sevoflurane appears to be at a lesser risk than older volatile agents like isoflurane, it is probably safer to avoid these agents in patients at risk of ventricular dysrhythmias, contrary to the conclusions of

Terao et al. In these patients, propofol should be preferred, without sevoflurane, for both induction and maintenance of anesthesia [5], especially as the present work confirms the good electrophysiological tolerance of propofol.

### References

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