

The effect of volatile anesthetics on EEG, auditory evoked potentials and somatosensory evoked potentials in dogs

Abstract:

We compared the changes in EEG and evoked potentials among dogs anesthetized with halothane (H), isoflurane (I) or enflurane (E). The mean frequency of EEG with H was higher than that with I and E at 1 and 2 MAC. The amplitude of the 5th wave of auditory brain stem response with H was larger than that with I and E at 2 MAC. In terms of the Pa wave of auditory middle latency response, the amplitude with H was larger than that with E at 1 MAC, and the incidence of the wave with H was higher than that with I and E at 2 MAC. The amplitudes of N2 and N3 waves of somatosensory evoked potentials with H and I tended to decrease with increasing MAC, whereas those with E increased temporarily at 1 MAC. The inhibitory effects on EEG and evoked potentials were different among three volatile anesthetics.