

Fig. 1. Inspired and expired concentrations of halothane, as measured with a Capnomac, just before and during the 60 s (maximum value) after spraying the vocal cords of each child with 20 mg of the new (top panel) or old (bottom panel) presentation of the 10% lidocane spray. Mean values ($\pm \text{SD}$) of changes are included in the graphs.

These errors in measurement typically lasted for about 1 min and probably were caused by the increased concentration of ethanol added

to the new presentation. It is well known that the measurement of anesthetic vapors by absorption of infrared radiation is affected by ethanol.²

Although the interaction was brief, we do not know whether repeated use of this new presentation could damage or more permanently affect the accuracy of the monitoring device.

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References

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In Reply:—Veyckemans et al. have demonstrated the effects of ethanol on measurement of anesthetic agents by infrared analysis. The effect of sampling gas containing ethanol is acknowledged in the Capnomac operator's manual. It should be noted that other anesthetic agent gas monitors can exhibit similar effects when exposed to ethanol.

The authors questioned whether ethanol can damage the monitor. Ethanol has no long-term effect on the accuracy, nor does it decrease the performance of the monitor. We recommend that users disconnect the sampling line for 5 min when administering lidocaine or any other nebulized medications.

The newer Capnomac Ultima with agent identification measures

and compensates for the effect of ethanol. This provides the clinician with a more accurate display of anesthetic agent concentration when ethanol is present.

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