Thiopentone or propofol for LMA insertion?

We read the article by Bapat et al., with interest. They demonstrated the good quality of laryngeal mask (LMA) insertion with midazolam-thiopentone and the poor conditions with lidocainethiopentone.

We would like to bring to your attention two studies we published earlier this year. In the first we showed that topical 40 mg lidocaine followed by 5 mg·kg⁻¹ thiopentone produced conditions for LMA insertion that were as good as those with 2.5 mg·kg⁻¹ propofol. The lidocaine thiopentone group had less haemodynamic depression and a shorter period of apnoea.

In a second study we compared the topical lidocaine-thiopentone group with IV lidocaine (at doses of 0.5 or 1.5 mg·kg⁻¹) before thiopentone. The conditions for insertion were poor in both IV groups (poor or unacceptable in 42%) but excellent or good in 87% of the topical group. As in Bapat's study all our patients also received fentanyl 1 μg·kg⁻¹ propofol.

Our findings suggest that an acceptable alternative to Batap's technique of fentanylmidazolam-thiopentone is fentanyl-topical lidocaine-thiopentone. This has the advantages of good haemodynamic stability and brief apnoea. As a smaller dose of lidocaine is used the possibility of lidocaine toxicity is low. Finally, the technique is cheaper than the fentanyl-midazolam-thiopentone technique. Topical 40 mg lidocaine costs approximately 6 cents.

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REFERENCES

REPLY
We thank Drs. Cook, Seavell and Cox for their interest in our study. Our objective was to evaluate an alternative IV induction technique to propofol for the insertion of the laryngeal mask airway (LMA). We agree that topical lidocaine with thiopentone could be a cheaper alternative. The use of topical lidocaine to facilitate LMA insertion is not new and has been reported previously.

Vomiting or regurgitation are more likely to occur during lighter planes of anaesthesia or during recovery from anaesthesia. An effective laryngeal reflex does confer some protection against aspiration during such an event. Our concern is that the use of topical anaesthesia would abolish this protective reflex and, therefore, may result in an increased risk of aspiration particularly during the recovery period after a short anaesthetic procedure.

Another question is that the use of topical lidocaine may not be acceptable to all patients, Cook et al. have not studied this issue. It would also be interesting to know the patient's preference, when they are given a choice of intravenous induction, or a combination of topical anaesthesia and intravenous induction.

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