CONCLUSION
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This study was carried out in 67 normotensive patients scheduled for surgical procedures requiring general anaesthesia and tracheal intubation. Aim of the study was to determine the effect of various drug combinations in attenuating the cardiovascular reflex responses to laryngoscopy and tracheal intubation. Lignocaine laryngotracheal topical spray, intravenous buprenorphine, and sublingual nifedipine were used alone and in three different combinations of two drugs each. From the analysis of the observations in the present study, the following conclusions are drawn.

In normotensive patients anaesthetised with thiopentone and suxamethonium, laryngoscopy and tracheal intubation evokes a cardiovascular response in the form of tachycardia and hypertension which is maximum at 1 minute after intubation. Both systolic and diastolic arterial pressures rise with an average rise in mean arterial pressure of about 40 mm Hg and returns to pre-operative levels in 5-10 minutes after intubation. The rise in heart rate and mean arterial pressure is highly significant ($P < 0.001$). In some patients
this is associated with cardiac arrhythmias like ventricular extrasystoles. The rate pressure product also increases significantly within 1 minute of intubation in all patients.

Laryngo-tracheal topical spray of lignocaine done immediately before laryngoscopy is not effective in preventing this cardiovascular response. Intravenous buprenorphine, 2.5 μg/kg given 8 minutes before laryngoscopy prevents the rise in mean arterial pressure to some extent (P < 0.05). Nifedipine 10 mg administered sublingually 10 minutes before laryngoscopy is more effective in preventing the rise in mean arterial pressure (P < 0.001). The rise in heart rate is not prevented by administration of any of these drugs. The increase in rate pressure product is attenuated by both buprenorphine and nifedipine but more with nifedipine. However, even on pre-treatment with buprenorphine or nifedipine the mean arterial pressure and rate pressure product changes from the basal value are highly significant (P < 0.001).

When these drugs were used in three different combinations of two drugs each, no added effect could be demonstrated. Effects of lignocaine, buprenorphine and lignocaine, nifedipine combinations are almost similar to that of buprenorphine and nifedipine respectively.
Buprenorphine, nifedipine combination gives an attenuation response which is closer to that of nifedipine alone. In other words the degree of reduction in maximum rise in mean arterial pressure with the drug combinations stood close to the effect of that particular individual drug of the combination, which showed a better effect than the other when used alone. Of all the drugs and drug combinations used in this study, nifedipine is most effective in attenuating the pressor response to laryngoscopy and tracheal intubation.