Effect of topical lignocaine on the sympathoadrenal responses to tracheal intubation

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Abstract:

The catecholamine and cardiovascular responses to laryngoscopy and tracheal intubation have been studied in 30 patients undergoing elective gynaecological surgery, allocated randomly to one of three groups: group 1 received 4% lignocaine 160 mg using a Forrester Spray; group 2 received 4% lignocaine 160 mg by "Laryng-o-jet"; group 3 received an equal volume of saline administered by Forrester Spray. In all three groups, there were similar and statistically significant increases in mean arterial pressure and plasma adrenaline and noradrenaline concentrations 1 min after intubation, with diminution of these responses by 5 min after intubation. There were no differences between the three groups at any stage, which suggests that topical anaesthesia of the mucosa of the upper airway, as performed conventionally, is ineffective as a means of ameliorating the pressor and catecholamine responses to routine laryngoscopy and intubation.