

Comparison of antihypertensive effects of nicardipine with nitroglycerin for perioperative hypertension 1995;33: 199-204.

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摘要

Abstract

BACKGROUND: To compare the efficacy of intravenous (iv) nicardipine with nitroglycerin for the treatment for patients with perioperative hypertension. **METHODS:** Forty patients with perioperative hypertension randomly divided into two groups were treated with intravenous calcium entry blocker, nicardipine, or vasodilator, nitroglycerin. Haemodynamic measurements including mean arterial and pulmonary arterial pressure, central venous and pulmonary capillary wedge pressure, and cardiac output were recorded; peripheral and pulmonary vascular resistance were calculated. **RESULTS:** Both medications were effective in reducing blood pressure and controlling haemodynamics. During the maintenance by continuous iv infusion, nicardipine controlled hypertension more rapidly than nitroglycerin (nicardipine 10.5 +/- 2.5 min and nitroglycerin 18.7 +/- 2.8 min, $p < 0.05$) without significant alteration in heart rate. The total frequency of dose adjustments required to achieve therapeutic response was significantly less in the nicardipine-treated group (2.5 +/- 0.3 for nicardipine and 6.2 +/- 1.4 for nitroglycerin, $p < 0.05$). Incidence of hypotensive episodes during the infusion were observed in both groups [nicardipine 5% (1/20) and nitroglycerin 30% (6/20), $p < 0.05$]. **CONCLUSIONS:** Intravenous nicardipine is as effective as nitroglycerin in the treatment of perioperative hypertension. Specific advantages have been identified such as stable dose-response effect, less hypotensive and tachycardial effects during the use of iv nicardipine in treatment of hypertensive patients.