

INSULIN THERAPY IN CALCIUM CHANNEL AND BETA-BLOCKER OVERDOSE: A REVIEW OF THE LITERATURE

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Abstract

Objectives: Calcium channel blocker (CCB) and beta blocker (BB) overdose are associated with significant morbidity and mortality. Conventional therapies with calcium salts, ionotropes and glucagon are often ineffective. The mechanisms used to model myocardial toxicity in CCB and BB overdose will be discussed along with an evaluation of the evidence supporting the use high-dose insulin therapy.

Methods: A literature search of PubMed was conducted using the MESH terms insulin therapy, calcium channel blocker, beta blocker, and overdose.

Results: Animal models suggest that high-dose insulin therapy improves both the efficiency of myocardial metabolism and overall hemodynamics. Clinical experience, although limited, reveals a trend towards increased survival.

Conclusion: Insulin therapy represents an emerging treatment for calcium channel blocker and beta blocker overdose.