

Global Summit on **CARDIOLOGY AND CARDIAC SURGERY**

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Safety and efficacy of levosimendan in severe left ventricular dysfunction in patients undergoing coronary artery bypass surgery**Dhanesh Kumar***Medanta-The Medicity, India*

Aim/Objectives: Levosimendan is a calcium sensitizing Inodilator. It has very narrow therapeutic window & dose dependent side effects in form of hypotension & arrhythmias. Keeping these things in mind we studied its efficacy & safety in Indian patients with severe Left ventricular dysfunction undergoing CABG.

Material and Methods: It was a prospective randomized double blind study in 50 patients of Coronary artery disease with severe left ventricular dysfunction (LVEF \leq 35%) who underwent CABG. Patients were divided randomly in two groups - one group (A) received Injection Levosimendan infusion \pm loading dose & group (B) received placebo (Injection Vitamin B complex solution to match the same colour) for 24 hrs. along with all their regular cardioprotective medications. Levosimendan started in calculated dose. Vital parameters & side effects were continuously recorded. Swan Ganz, Echocardiographic readings were recorded at various time intervals from start of infusion to 48hrs postoperatively.

Results: We found it safe, well tolerated in our patients. Hypotensive effect was less likely when we avoid bolus dose (6mcg/Kg/min) & gave it in low dose infusion (0.05-0.2mcg/Kg/min) in patients having SBP<100mm Hg. We found significant hypotension in 3 out of 28 (10%) patients. None of our patients complained of nausea, vomiting, dizziness or headache. We found AF in 10% & premature ventricular contraction in 17% following Levosimendan infusion up to 48 hrs.

Conclusion: Levosimendan is a safe drug when used when used cautiously in low dose infusion under monitoring. Adverse effects are attributed to its vasodilatory effects especially when loading doses are used.

Biography

Dhanesh Kumar completed my doctorate degree in cardiothoracic and vascular study at the age of 32years from National Heart Institute, New Delhi in 2019. He have presented multiple papers and posters in national and international conferences. He has published multiple papers and chapters for books on cardiology. Currently He is working as associate consultant in cardiothoracic and vascular surgery in Medanta-The Medicity hospital, Gurugram, India