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*RESEARCH ARTICLE*

# EFFECT OF LEVOSIMENDAN ON SHORT TERM AND LONG TERM CLINICAL COURSE OF PATIENTS WITH ACUTELY DECOMPENSATED HEART FAILURE IN INDIAN POPULATION

**Dr. Seshi Vardhan Janjirala**
Kurnool Medical College.

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## *Abstract*

We evaluated the efficacy of levosimendan, a positive inodilator, given intravenously to patients with acutely decompensated heart failure (ADHF).

**Methods:** Patients admitted with ADHF received placebo or IV levosimendan for 24 hr in addition to standard treatment. The primary endpoint was a composite that evaluated changes in clinical and laboratory status at 30th day and at 180th day.secondary end point is all cause mortality.

**Results**: In the 125-patient trial, more levosimendan than placebo patients were improved at discharge, whereas fewer levosimendan patients experienced clinical worsening at 6 months. The functional class, cardiac contractility ( FS,EF) were better in simenda group at 3rd month both neumerically and statistically.All-cause mortality at 180 days occurred in 5% patients in the levosimendan group and 28%patients in the placebo group. The levosimendan group had greater decreases in Brain Natriuretric peptide level at 24 hours. There were no statistical differences between treatment groups for the other secondary end points (all-cause mortality at 31 days, number of days alive and out of the hospital, patient global assessment, patient assessment of dyspnea at 24 hours, and cardiovascular mortality at 180 days). There was a higher incidence of cardiac failure in the placebo group. There were higher incidences of atrial fibrillation, hypokalemia, and headache in the levosimendan group

**Conclusions**: In patients with ADHF, intravenous levosimendan provided rapid and durable symptomatic relief and levosimendan improved haemodynamic performance more effectively than placebo. 6MHWD, quality of life, worsening of heart failure, cardiac structure and function were statistically and numerically improved in simenda group for first 3months;However the results were not consistent for 180 days.This benefit was accompanied by lower mortality in the levosimendan group than in the placebo group for up to 180 days.



## Introduction:-

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**Corresponding Author:- Dr. Seshi Vardhan Janjirala**
Address:- Kurnool Medical College.

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