MORPHINE AND OUTCOMES IN ACUTE DECOMPENSATED HEART FAILURE: AN ADHERE ANALYSIS

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BACKGROUND: Although morphine is purported to reduce preload and has long been used for the treatment of pulmonary edema and acute congestive heart failure (CHF), evidence supporting its routine use for this indication is limited, at best.

METHODS: These authors, coordinated at the Cleveland Clinic, reviewed registry data from 147,362 adults hospitalized for acute CHF who were included in the "Acute Decompensated Heart Failure National Registry" (ADHERE) to compared selected outcomes in patients who had or had not been treated with morphine.

RESULTS: Treatment with IV morphine was documented for 14.1% of the patients. Patients treated with morphine were more likely than those not so treated to have dyspnea at rest, radiographic congestion, rales and increased troponin, but there were no other clinically relevant differences between the two groups. Patients treated with morphine were also more likely to receive inotropes and vasodilators. The rate of admission to the ICU was 38.7% in patients treated with morphine vs. 14.4% in those not so treated, and the median duration of the ICU and inpatient stay was 3.0 vs. 2.2 days, and 5.6 vs. 4.2 days, respectively. Rates of mechanical ventilation in the morphine and no morphine groups were 15.4% vs. 2.8%. The mortality rate was 13% in patients treated with morphine vs. 2.4% in patients not treated with morphine. After adjustment for potential confounders, the mortality risk was about five-fold higher in patients treated with morphine.

CONCLUSIONS: The authors acknowledge the limitations of their non-randomized study, but believe that their findings suggest an increased risk of adverse outcomes in patients with acute CHF who are treated with morphine. 16 references (peacocw@ccf.org - no reprints)

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