

## Routine Inpatient Admission Not Beneficial for Patients with Chest Pain



According to an article published in JAMA Internal Medicine, routine inpatient admission may not be a beneficial strategy for patients with chest pain. Patients with negative findings and nonconcerning vital signs rarely had adverse cardiac events.

Patients with potentially ischaemic chest pain are commonly admitted to the hospital or are kept under observation because of concern about adverse events. However, there have been no large studies to date that examine the short-term risk for a clinically relevant adverse cardiac event, including inpatient ST-segment elevation myocardial infarction, life-threatening arrhythmia, cardiac or respiratory arrest, or death.

This article presents the findings from a review conducted by Michael B. Weinstock, M.D., of Ohio State University, Columbus, and Mount Carmel St. Ann's Hospital, Westerville, and co-authors. Their review includes adult patients who were hospitalised and kept under observation after complaining of chest pain, chest tightness, chest burning or chest pressure and with negative findings for serial biomarkers.

The authors collected the data from emergency departments at three community teaching hospitals and examined 45,416 encounters out of which 11,230 patients met the criteria. The average age of the patients included in the review was 58 years and over half of these patients were women. The primary outcome measurement was a composite of life-threatening arrhythmia, inpatient ST-segment elevation myocardial infarction, cardiac or respiratory arrest, or death which occurred in 20 of the 11,230 patients. However, after excluding these 20 patients, primary outcome event occurred in only four patients. This translates into a 0.06 percent of risk of a primary outcome event occurring.

"Our study does not demonstrate that patients derive no utility from further management or diagnostic workup after the ED [emergency department] evaluation. We believe that judicious follow-up is in the best interest of most such patients. However, our findings suggest that further evaluation may be best performed in the outpatient rather than the inpatient setting, and that this information should be integrated into shared decision-making discussions regarding potential admission. Moreover, in the context of established risks due to hospitalization, we believe that current recommendations to admit, observe or perform provocative testing routinely on patients after an ED evaluation for chest pain has negative findings should be reconsidered," the study concludes.

Source: JAMA Internal Medicine

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