

Research - R118

Oral

Abstract Title:

Utility of Preoperative Echo in Geriatric Trauma Patients

Authors:

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Background & Purpose:

The geriatric population continues to grow, now accounting for 18% of the population. These patients are a unique cohort in trauma as they often have worse outcomes compared with their younger counterparts. The American Heart Association (AHA) recommends preoperative cardiac clearance for patients undergoing an elective operation to risk stratify patients with known cardiac disease. The utility of this in the trauma setting remains unclear. We sought to identify the role of preoperative echocardiograms (echo) in trauma patients over age 60 admitted to our geriatric trauma service (G60) requiring urgent surgical intervention.

Study/Project Design:

Retrospective review of trauma database

Setting:

600 bed Urban Trauma Center

Sample:

330 consecutive geriatric trauma patients (age 65 and older) over a 12 month period

Procedures:

We performed a retrospective review of geriatric trauma patients requiring surgery over a one year period. Patients with echos performed based on a medicine consult were compared to those that did not have echos. Variables examined were: Time to operating room, (OR), hospital length of stay (HLOS), intensive care unit length of stay (ICULOS), change in management based on echo, cardiac morbidity, and mortality.

Findings/Results:

Over a 12 month period, we evaluated 330 consecutive geriatric trauma patients who required an operation. Virtually all (96%) of the operations were orthopedic in nature. A preoperative echo was performed in 81/330 (25%) of patients based on preoperative screening by a geriatrician. Of the 81 patients who received an echo, none had a clinically significant change in management. Echo patients had a longer time to OR ($p < .05$), HLOS ($p < .006$), and ICULOS ($p < .05$) than non-echo patients. There were 3 cardiac morbidities in the entire cohort and none of them were predictable based on preoperative echo. Mortality was not different in the two groups.

Discussion/Conclusions/Implications:

As healthcare reform focuses on resource utilization, hospital morbidity, and length of stay, it is increasingly important to critically evaluate every test we order and the impact it has on the care of our patients. In this review, preoperative echo did not provide a clinical benefit, and, in fact, may have delayed the care and resulted in an increased LOS. Based on this data, preoperative echo may not be routinely indicated in geriatric trauma patients.