A Comparison of the Quality of Treatment/Management of Patients Presenting at the Emergency Department (ED) with Chest Pain with or without a Cardiologist as Part of the ED Staff

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Background: The concept of having a "chest pain (CP) unit" in the emergency department (ED) is evolving. The additional value of just having a cardiologist involved in the ED team, without a dedicated space or monitored beds (a "mobile CP unit") has not been evaluated yet.

Methods: We studied efficacy and diagnostic accuracy parameters in the management of 221 patients admitted to the ED for CP. We compared days with a cardiologist in the ED staff (Group A) and days when he was not present (Group B). All patients were followed in-hospital (if admitted) and at 30 days.

Results: Groups were similar in baseline characteristics including TIMI risk score. In patients in group A diagnostic and imaging studies were used significantly more often (10.4% vs. 2.2%, p=0.04). Pharmacological treatment according to ACC/AHA guidelines was used more often in group A (mainly heparins, p=0.048). Moreover, patients in group B with a discharge diagnosis of acute coronary syndrome less often received any treatment in the ED (63.1% vs. 37.5%, p=0.042). Admission rate to the hospital was higher in group B (74.7% vs. 66.4%, p=0.01). Patients in group B who were discharged from the ED used more medical resources after discharge (25.3% vs. 9.7%, p=0.002).

Conclusions: The addition of a cardiologist to the ED staff (a "mobile CP unit") is effective, saves resources and significantly improves treatment and diagnosis of patients with acute CP.