

The barts heart attack centre early discharge pathway:- a novel protocol for next day discharge after primary pci for ST-elevation myocardial infarction

Comer K.; Casey-Gillman O.; Moore E.; Adey S.; Mower S.

Barts NHS trust , Cardiology , London, United Kingdom of Great Britain & Northern Ireland

Funding Acknowledgements: Type of funding sources: None.

Introduction : To respond to the challenges of COVID-19 and based on evidence confirming low rates of Major Adverse Cardiac Events (MACE) occurring between 24- and 48-hours post AMI (Acute Myocardial Infarction), we sought to design and implement a novel Early Hospital Discharge (EHD) pathway

Aim:

The goal of the EHD protocol is to accurately and efficiently identify low-risk AMI patients who can be safely discharged between 24 and 48 hours after successful primary PCI, aiming to provide a safe discharge for low risk patients, reduce length of stay enhance the follow up of patients post AMI

Methodology :

Project was designed a QI project and patients were discharged with a structured follow up at 48 hours , 2 weeks and 8 weeks and with a interventional cardiologist at 3 months

Virtual follow up was conducted using a bespoke application enable a 2 way messaging and video consultation

Patients with AMI are taken for primary PCI in an unselected manner which includes post cardiac arrest, intubated and ventilated patients

Results :The median follow-up was 201 days (OQR: 98-268 days). In the early discharge group, there were 2 deaths (0.5%), both due to COVID-19 (both >30 days after d/c) with 0% cardiovascular mortality (comparator group 5% mortality, 2.5% cardiovascular

Overall, this resulted in a significant reduction in the overall length of stay for all patients presenting with STEMI undergoing primary PCI over the time period. The median length of stay was 3 days (IQR 2-5 days) from October 2019 to March 2020 before the pathway was introduced. Following the pathway introduction, from April 2020 to February 2021 the median length of stay was 2 days (1-4 days) ($p < 0.0001$), significantly reduced from pre pathway introduction

Conclusion :Driven by the necessity to adapt to the pandemic, we report the safe and successful implementation of an early post MI discharge pathway with an integrated and structural multidisciplinary virtual follow up schedule. This has shortened hospital admission times, decreasing the risk of nosocomial infections and optimised resource utilization, while at the same time enhancing the quality of post discharge care with high levels of patient satisfaction.