Pengaruh Penerapan Program CODE STEMI Terhadap Door to Balloon Time dan Major Adverse Cardiac Events Pasien ST Elevation Myocardial Infarction yang Menjalani Primary Percu = Impact of CODE STEMI Program Implementation on Door to Balloon Time and Major Adverse Cardiac Events of Patients with ST Elevation Myocardial Infarction undergoing Primary

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Abstrak

Latar Belakang:Keterlambatan penanganan pasien STElevation Myocardial Infarction(STEMI)menjadi penyebab tingginya mortalitas dan kejadian MACE (Major Adverse Cardiac Events). Di Indonesia, pasien pasien STEMI sering mengalami keterlambatan penanganan. Upaya yang dapat dilakukan di fasilitas kesehatan dengan kemampuan Primary Percutaneous Coronary Intervention(PCI) adalah mencapai reperfusi tepat waktu pasien STEMI. Berbagai strategi dilakukan untuk mencapai reperfusi tepat waktu diantaranya dengan menerapkan program CODE STEMI. Program CODE STEMI merupakan notifikasi STEMI melalui sistem panggilan tunggal yang dapat mempercepat waktu reperfusi pasien STEMI di rumah sakit.
Tujuan:Mengetahui pengaruh penerapan program CODE STEMI terhadap Door to Balloon Time (D2BT) dan MACE pasien STEMI yang menjalani PrimaryPCI di RSUPN Cipto Mangunkusumo Jakarta.
Metode:Penelitian ini merupakan studi kohort retrospektif pada 255 rekam medis pasien STEMI yang menjalani PrimaryPCI di RSUPN Cipto Mangunkusumo sebelum penerapan program CODE STEMI (2015-2016) dan sesudah penerapan program CODE STEMI (2017-2018). Analisis data dilakukan secara kuantitatif dengan uji Mann whitney untuk D2BT dan chi square untuk MACE.
Hasil:Terdapat 111 pasien pada kelompok Non CODE STEMI dan 144 pasien pada kelompok CODE STEMI. D2BT berkurang bermakna 110 menit dari 275 (99-2356) menit pada kelompok Non CODE STEMI menjadi 165 (67-1165) menit pada kelompok CODE STEMI (p <0.001). Kejadian MACE (48,4% vs 51,6%; p = 0,120), gagal jantung (46,6% vs 42 %; p = 0,288), syok kardiogenik (27% vs 19,4%; p = 0,152), aritmia (12,6% vs 6,2%; p = 0,079), stroke (4,5% vs 5,6%; p = 0,705) dan angka mortalitas (7,2% vs 3,5%; p = 0,179) sama antara kedua kelompok.Kejadian infark berulang dan PCI ulang berkurang bermakna pada kelompok CODE STEMI (4,5% vs 0,7%; p = 0.047, 2,7% vs 0,0%; p = 0.047).
Simpulan:Program CODE STEMI memperbaiki D2BT. Program CODE STEMI tidak menurunkan kejadian MACE.
.....Background: Delay in the management of ST Elevation Myocardial Infarction (STEMI)patients is a cause of high mortality and the incidence of Major Adverse Cardiac Events (MACE).In Indonesia, STEMI patients often experience delays in treatment. Efforts that can be made in health facilities with Primary PercutaneousCoronary Intervention(PCI)capability are achieving timely reperfusion of STEMI patients. Various strategies were carried out to achieve timely reperfusion including implementationthe CODE STEMI program. The CODE STEMI program is a STEMI notification through a single call system that can speed up the reperfusion time of STEMI patients in the hospital.

Objective:To determine the effect of the implementation of the CODE STEMI program on Door to Balloon Time (D2BT) and MACE of STEMI patients undergoing Primary PCI at Cipto Mangunkusumo National Central General Hospital Jakarta.
Methods: This was a retrospectivecohort study on 255 medical records of STEMI patients undergoing Primary PCI at Cipto Mangunkusumo National Central General Hospital before the application of the CODE STEMI program (2015-2016) and after the application of the CODE STEMI program (2017-2018). Data analysis was performed quantitatively by Mann Whitney test for D2BT and chi square for MACE
Results:There were 111 patients in the Non CODE STEMI group and 144 patients in the CODE STEMI group. D2BT decreased significantly 110 minutes from 275 (99-2356) minutes in the Non CODE STEMI group to 165 (67-1165) minutes in the CODE STEMI group ($p < 0.001$). MACE events (48.4% vs 51.6%; p= 0.120), heart failure (46.6% vs 42%; p = 0.288), cardiogenic shock (27% vs 19.4%; p = 0.152), arrhythmia (12.6% vs 6.2%; p = 0.079), stroke (4.5% vs 5.6%; p = 0.705) and mortality rate (7.2% vs 3.5%; p = 0.179) were similar between the two groups. The incidence of reinfarction and repeated PCI was significantly reduced in the CODE STEMI group (4.5% vs 0.7%; p = 0.047, 2.7% vs 0.0%; p = 0.047).C
onclusions:The CODE STEMI program reduces D2BT. The CODE STEMI program did not reduce the overall MACE incidence but reduced the incidence of reinfarction and repeated PCI of STEMI patients undergoing Primary PCI at Cipto Mangunkusumo National Central General Hospital.