Usporedba učinkovitosti i sigurnosti između tikagrelora s heparinom i klopidoigrela s heparinom ili enoksaparinom prije primarne perkutane koronarne intervencije u akutnom infarktu miokarda – prva iskustva iz mreže zapadne Slavonije

Safety and efficacy of ticagrelor and heparin compared to clopidogrel and heparin or enoxaparin before primary percutaneous coronary intervention in ST-segment elevation myocardial infarction – first experiences from Western Slavonia network

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KLJUČNE RIJEČI: antitrombotska terapija, primarna perkutana koronarna intervencija, infarkt miokarda s elevacijom ST-segmenta.

KEYWORDS: antithrombotic therapy, primary percutaneous coronary intervention, ST-segment elevation myocardial infarction.

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UVOD: Unutar mreže primarne perkutane koronarne intervencije (pPCI) optimalna antitrombotska terapija i što hitniji transport prije zahvata gotovo su jednako važni kao i sam postupak pPCI. Učinjena je usporedba učinkovitosti i sigurnosti tri različite kombinacije antitrombotičkih lijekova korištenih prije pPCI u kateterizacijskom laboratoriju u Slavonskom Brodu: od veljače 2014. dostupnog tikagrelora s heparinom, do sada standardnog klopidoigrela s heparinom te klopidoigrela s enoksaparinom.

PACIJENTI I METODE: U razdoblju od veljače 2014. do rujna 2014. godine analizirani su podaci o 87 bolesnika s akutnim infarktom miokarda s elevacijom ST-segmenta koji su bili podvrgnuti zahvatu pPCI. Učinjene su analize udjela TIMI 3 protoka, bolničke smrtnosti, velikog krvarenja i akutne in-stent tromboze ovisno o kombinaciji antitrombotičke terapije prije zahvata.

REZULTATI: U navedenom razdoblju 35% bolesnika dobilo je tikagrelor, a 65% bolesnika klopidoigrel prije početka pPCI. Od bolesnika koji su dobili klopidoigrel, 48% bilo je transferirano iz suradnih centara. Kardiogeni šok prije početka pPCI imalo je 10% bolesnika na tikagreloru, a 1,8% bolesnika na klopidoigrelu. Bilo je ukupno 30 bolesnika liječenih kombinacijom tikagrelora i heparina, 31 liječen klopidoigrelom i heparinom te 26 liječenih klopidoigrelom i enoksaparinom. Nije nađeno značajnih razlika u TIMI 3 protoku (90% vs 92% vs 90%), unutarbolničkoj smrtnosti (6,7% vs 6,5% vs 3,8%) i pojavi velikog krvarenja (3,3% vs 6,5% vs 0%). Akutna in-stent tromboza nije zabilježena među bolesnicima liječenim tikagrelorom s heparinom odnosno klopidoigrelom s enoksaparinom, dok je udio među bolesnicima na klopidoigrelu s heparinom bio 1,8%.

ZAKLJUČAK: Strategija primjene tikagrelora s heparinom prije pPCI pokazala se sigurnom i učinkovitom, a ukoliko tikagrelor nije dostupan u trenutku upućivanja bolesnika na pPCI, preporučljiva je kombinacija klopidoigrela s enoksaparinom.

INTRODUCTION: Within primary percutaneous coronary intervention (pPCI) networks, optimal antithrombotic therapy and urgent transport before the procedure is almost as important as the procedure itself. We compared the efficacy and safety of three different combinations of antithrombotic drugs used before pPCI in Cardiac Catheterization Laboratory in Slavonski Brod: ticagrelor with heparin (available from Feb 2014), so far the standard combination of clopidogrel with heparin and clopidogrel with enoxaparin.

PATIENTS AND METHODS: From February 2014 to September 2014 data on TIMI 3 flow, in-hospital mortality, major bleeding and acute in-stent thrombosis depending on the combination of antithrombotic therapy in 87 patients with acute ST-segment elevation myocardial infarction who underwent pPCI were analyzed.

RESULTS: In this period, 35% of patients received ticagrelor, and 65% of patients received clopidogrel before the start pPCI. Of the patients who received clopidogrel, 48% were transferred from the participating non-PCI centers. Cardiogenic shock before the start of pPCI was present in 10% of patients on ticagrelor, and 1.8% of patients on clopidogrel. There were a total of 30 patients treated with the combination of ticagrelor and heparin, 31 treated with clopidogrel and heparin, and 26 treated with clopidogrel and enoxaparin. There were no significant differences in TIMI 3 flow (90% vs. 92% vs. 90%), in-hospital mortality (6.7% vs. 6.5% vs. 3.8%), and major bleeding (3.3% vs. 6.5% vs. 0%). Acute in-stent thrombosis was not observed among patients treated with ticagrelor and heparin or clopidogrel with enoxaparin, whereas the proportion among patients on clopidogrel with heparin was 1.8%.

CONCLUSION: Ticagrelor with heparin before pPCI was shown to be safe and effective. If ticagrelor is not available at the time of referral to pPCI the combination of clopidogrel and enoxaparin should be considered.

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