Sažetak sa skupa

Invazivno kardiološko i kardiokirurško liječenje akutnog koronarnog sindroma

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Akutni koronarni sindrom (ACS) u razvijenim zemljama i dalje ima vrlo visoku smrtnost, a iako je učinjen značajan napredak u liječenju tih bolesnika, još uvijek ima dosta mjesta za daljnji napredak.

CILJ LIJEČENJA kod akutnog koronarnog sindroma sa ST elevacijom (STE-ACS) je postići što bržu, što potpuniju i postojanu rekanalizaciju odgovorne arterije uz uspostavljanje normalne perfuzije miokarda bilo primarnom perkutanom koronarnom intervencijom (pPCI), bilo primjenom fibrinolize. Bez obzira na način reperfuzije, primarni cilj je

Meeting abstract

Invasive cardiac and cardiosurgical treatment of acute coronary syndromes

Acute coronary syndrome (ACS) in developed countries still shows a very high mortality rate, although a great progress has been achieved regarding the treatment of such patients, still there is quite a lot of room to make further advancements.

AIM OF TREATMENT with ST-segment elevation acute coronary syndrome (STE-ACS) is to accomplish ever faster, more complete and persistent recanalization of infarct related artery, thereby establishing a normal perfusion of myocardium either by primary percutaneous coronary intervention (pPCI), or by applying fibronolysis. Irrespective of

maksimalno smanjiti ukupno vrijeme ishemije. S druge strane, glavni cilj terapije kod akutnog koronarnog sindroma bez ST elevacije (NSTE-ACS) je ukloniti ishemiju i anginu i kao najvažnije spriječiti progresiju u infarkt sa ST elevacijom (STEMI) ili nastup smrti. U nastavku je cilj postaviti konačnu dijagnozu nestabilne angine ili infarkta bez ST elevacije i procijeniti visinu rizika o čemu ovisi konačni terapijski pristup.

INTERVENTNO KARDIOLOŠKO LIJEČENJE najčešće je terapija izbora za sve ACS. Indikacije za pPCI kod STE-ACS su: (1) simptomatski STEMI trajanja manje od 12h, (2) STEMI koji traje 12-24h uz perzistentu bol, (3) STEMI s kardiogenim šokom unutar 24 sata od početka, (4) neuspjela tromboliza unutar 12h od početka boli (prvenstveno anteroseptalni IM), (5) suspektna reokluzija nakon trombolitičke terapije i (6) nedijagnostički EKG (blok lijeve grane, elektrostimulacija) s pozitivnim enzimima, refraktornom anginom, hemodinamskom nestabilnošću. Što se tiče NSTE-ACS prema rezultatima novih studija i meta-analiza koji su uključeni u nove smjernice urgentna koronarografija (<120min) se preporuča samo u bolesnika s refraktornom ili rekurentnom anginom uz prisutnu dinamiku ST promjena, zatajivanje srca, po život opasne aritmije ili hemodinamsku nestabilnost. Rana koronarografija (<72h) i u nastavku revaskularizacija (PCI ili CABG) preporuča se kod bolesnika s srednjim do visokim rizikom. Rutinska invazivna obrada bolesnika s niskim rizikom se ne preporuča, ali se savjetuje neinvazivna obrada.

DILEMA OKO VREMENA INTERVENTNOG LIJEČENJA — Bolesnici sa STE-ACS koji dolaze u bolnicu sa mogućnošću PCI trebaju dobiti pPCI unutar 90 minuta. Oni koji dolaze u bolnicu bez PCI i ne mogu biti transportirani u PCI centar unutar 90 minuta trebaju biti liječeni fibrinolizom unutar 30 minuta od dolaska. Glavna dilema ostaje je li fibrinoliza ili transport bolesnika u PCI centar kada se radi o STEMI s trajanjem simptoma <3 sata. Kod liječenja NSTE-ACS glavna dilema što se tiče vremena je pitanje rutinske rane intervencije ili odgođene intervencije. Podaci iz dugotrajnog praćenja bolesnika u RITA-3, FRISC-2 govore u prilog rane intervencije uz značajnu redukciju rizika za smrt i infarkt miokarda. Međutim, prema novim studijama (ICTUS) i Mehtinoj meta-analizi rutinska rana invazivna strategija ima lošije rezultate nego selektivna invazivna strategija. Stoga i nove smjernice za liječenje NSTE-AKS preporučaju hitnu intervenciju samo u slučaju visokog rizika.

MEDIKAMENTNA TERAPIJA UZ PCI — Periproceduralna terapija kod svih ACS je relativno dobro definirana. Kod NSTE-ACS nove studije (ISAR-REACT-2) pokazale su da je trojna antitrombocitna terapija superiorna u odnosu na dvojnu i to kod bolesnika s umjerenim do visokim rizikom kod kojih će se učiniti PCI.

MJESTO KARDIJALNE KIRURGIJE U LIJEČENJU AKS — S razvojem PCI udio kardijalne kirurgije u liječenju ACS je značajno manji. Ipak kirurgija i dalje ima centralno mjesto u liječenju ACS kod određenih indikacija: (1) značajna stenoza debla lijeve koronarne arterije, (2) bolesnik s višežilnom koronarnom bolesti, neodređenom odgovornom lezijom i TIMI III protokom, (3) bolesnik s mehaničkim komplikacijama infarkta miokarda, (4) hibridno liječenje — perkutano je učinjena intervencija na odgovornoj leziji ili arteriji, a kompletna revaskularizacija se učini kirurški.

the reperfusion strategy, the primary goal is to largely reduce the total ischemia time. On the other hand, the major goal of the therapy with non-ST-segment elevation acute coronary syndrome (NSTE-ACS) is to eliminate ischemia and angina and most importantly to prevent the progression into ST-segment elevation myocardial infarction (STEMI) or occurrence of death. In the below text, the goal is to finally diagnose unstable angina or non-ST-segment elevation myocardial infarction and stratify the risk, which the final therapeutic strategy is dependent on.

INTERVENTIONAL CARDIAC TREATMENT is the most common therapy of choice for all ACS. The indications for pPCI with STE-ACS are: (1) symptomatic STEMI lasting <12 hours, (2) STEMI lasting from 12-24 hours with persistent chest pain, (3) STEMI with cardiogenic shock within 24 hours from the symptom onset, (4) thrombolysis failure within 12 hours from the onset of pains (primarily anteroseptal STEMI), (5) suspicious reocclusion following thrombolytic therapy and (6) nondiagnostic ECG (left bundle branch block, electrostimulation) with positive markers of necrosis, refractory angina, hemodynamic instability. Concerning NSTE-ACS, according to the results of the most recent studies and meta-analysis included in the new guidelines, urgent coronarography (<120min) is recommended only for the patients with refractory or recurring angina with present dynamics of ST changes, heart failure, arrhythmia that is dangerous for life or hemodynamic instability. Early coronarography (<72h) with revascularization (PCI or CABG) is recommended for patients with medium to high risk. Routine invasive management of patients with low risk is not recommended, but noninvasive management is advised.

DILEMMA ABOUT THE TIME OF INTERVENTION TREATMENT — The patients with STE-ACS who come to interventional centre need to be administered pPCI within 90 minutes. Those who come to the hospital without possibility of PCI and may not be transported to the interventional centre within 90 minutes need to be treated by fibrinolysis within 30 minutes following their arrival. The main dilemma is still whether fibrinolysis or transport of patients to the PCI center should be done when symptoms of STEMI last for <3 hours. When treating NSTE-ACS the main dilemma concerning the time is the question of routine early intervention or delayed intervention. The data relating to long-term monitoring the patients in RITA-3, FRISC-2 favor the interventions with significant reduction of risk for death and myocardial infarction. However, according to the most recent studies (ICTUS) and Mehta's meta-analysis, a routine early invasive strategy shows some worse results than selective invasive strategy. Therefore, the new treatment guidelines NSTE-ACS suggest an urgent intervention only in the event of high risk.

PHARMACOLOGICAL THERAPY WITH PCI — Periprocedural therapy with all ACS is relatively well defined. With regard to NSTE-ACS, the new studies (ISAR-REACT-2) have showed that the triple antithrombotic therapy is superior in comparison to the dual therapy particularly with patients with moderate to high risk for whom PCI is to be carried out.

PLACE OF CARDIAC SURGERY IN THE TREATMENT OF AKS — Along with the development of PCI, the role of cardiac surgery in treatment of ACS is significantly decreased. Anyway, surgery still takes a central place in the treatment of ACS in specific indications: (1) a significant stenosis of the left coronary artery trunk, (2) a patient with multi-vessel coronary heart disease, non-determined accountable lesion and TIMI III flow, (3) a patient with mechanic complications, (4) hybrid treatment — percuta-

STABILNA ANGINA PEKTORIS KAO AKUTNO STANJE — Stabilna angina pektoris klinički je definirano stanje. Međutim, postoje bolesnici sa stabilnom kliničkom slikom ali kritičnim morfološkim nalazom koji zahtjeva da im se s terapijskog stajališta pristupi kao akutnom bolesniku. Obzirom da težina simptoma ne prati stupanj aterotrombotske opstrukcije takvi bolesnici mogu ostati neprepoznati i posljedično tome imati lošiju prognozu. Također treba napomenuti da je to grupa bolesnika koja nije definirana u smjernicama.

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neous intervention has been performed on the related lesion or artery, and the overall revascularization has been surgically done.

STABLE ANGINA PECTORIS AS EMERGENCY — Stable angina pectoris is clinically defined condition. However, there are patients with stable clinical manifestations but also critical morphologic finding requiring to be approached as acute patient from the therapeutic point of view. Since the seriousness of symptoms fails to comply with the degree of atherothormbotic obstruction, such patients may remain unnoticed and consequently have a worse prognosis. It is also worth mentioning that this is the group of patients that has not been defined in the guidelines.