Odnos *SYNTAX score II* s nalazima lipidograma i urata i prisustvom šećerne bolesti u bolesnika s višežilnom koronarnom bolesti srca

The correlation between SYNTAX score II and lipid panel and uric acid test results and diabetes mellitus in patients with multivessel coronary artery disease

Vedran Đambić[1],
Ivica Bošnjak[2],
Aleksandar Kibel[1,2]*

[1]Medicinski Fakultet Osijek, Osijek, Hrvatska
[2]Klinički bolnički centar Osijek, Osijek, Hrvatska

[1]Faculty of Medicine, Osijek, Croatia
[2]University Hospital Centre Osijek, Osijek, Croatia

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***ADDRESS FOR CORRESPONDENCE**: Aleksandar Kibel, Klinički bolnički centar Osijek, Josipa Huttlera 4, HR-31000 Osijek, Croatia. / Phone: +385-91-9251-229 / E-mail: aleksandar_mf@yahoo.com

ORCID: Vedran Đambić, https://orcid.org/0000-0001-6903-2439 • Ivica Bošnjak, https://orcid.org/0000-0002-0223-4287 Aleksandar Kibel, https://orcid.org/0000-0001-7843-1079

Uvod: *SYNTAX score II* (SS II) je angiografsko-klinički alat koji omogućava objektivnu individualizaciju predviđanja smrtnosti u pacijenata koji boluju od višežilne koronarne bolesti srca (KBS)[1]. Višežilna KBS označava zahvaćenost najmanje dviju epikardijalnih koronarnih arterija, a predstavlja lokalnu manifestaciju ateroskleroze[2,3]. Cilj je ispitati imaju li dislipidemija, hiperuricemija i prisustvo dijabetesa pozitivnu povezanost s višim bodovnim vrijednostima SS-a II.

Bolesnici i metode: Uključeno je 72 ispitanika s višežilnom KBS u razdoblju od 1. listopada 2015. do 1. listopada 2017. Potrebni podaci dobiveni su iz bolničko informatičkog sustava (BIS) i bolničke arhive. Putem online kalkulatora izračunao se SS I za koji je potrebna interpretacija koronarograma, a onda SS II koji uključuje dvije anatomske (SS I, zahvaćenost glavnog debla lijeve koronarne arterije) i šest kliničkih varijabli (dob, spol, klirens endogenog kreatinina, ejekcijska frakcija, prisutnost kronično opstruktivne plućne bolesti i periferne vaskularne bolesti u anamnezi).

Rezultati: Značajna je pozitivna povezanost između vrijednosti lipoproteina visoke gustoće (HDL) i između udjela pacijenata koji imaju razinu HDL-a iznad referentne vrijednosti sa SS-om II perkutane koronarne intervencije (PCI) (medijan 46,3; P = 0,04). Ispitanici koji imaju snižene vrijednosti lipoproteina niske gustoće (LDL) imaju značajno povišene vrijednosti SS-a II premošćivanje srčane arterije presađivanjem tkiva (CABG) (medijan 35,5; P = 0,04), ali ne i SS-a II PCI. Ukupni kolesterol i trigliceridi nemaju značajne povezanosti sa SS-om II PCI ni sa SS-om II CABG. Ispitanici s hiperuricemijom imaju značajno povišenu vrijednost SS-a II PCI (medijan 43,7; P = 0,04), ali ne i SS-a II CABG. Dijabetes kao komorbiditet prisutan je kod 32 ispitanika (44 %) u kojih je prisutna značajno povišena vrijednost SS-a II PCI (medijan 43,4; P = 0,03), ali ne i SS-a II CABG, u odnosu na ispitanike koji ne boluju od dijabetesa.

Zaključak: SS II pokazuje povezanost s nekim od klasičnih čimbenika rizika za aterosklerozu (urati, dijabetes), dok s lipidogramom u našoj skupini ispitanika pokazuje iznenađujuću povezanost s visokim HDL-om i niskim LDL-om.

Introduction: Syntax score II (SS II) is an angiographic-clinical tool that allows an objective individualization of mortality prediction in patients suffering from multivessel coronary artery disease (CAD)[1]. Multivessel CAD indicates the involvement of at least two epicardial coronary arteries and represents a local manifestation of atherosclerosis[2,3]. The aim is to examine whether dyslipidemia, hyperuricemia and the presence of diabetes have a positive correlation to higher SS II values.

Patients and Methods: 72 participants with multiple CAD hospitalized during the period of October 1, 2015. to October 1, 2017 were included. The necessary data was obtained from the hospital information system (BIS) and the hospital archive. An online calculator was used to calculate the SS I for which an interpretation of the coronary angiogram is required, and then the SS II involving two anatomical (SS I, left main coronary artery involvement) and six clinical variables (age, gender, creatinine clearance, ejection fraction, presence of chronic obstructive pulmonary disease and peripheral vascular disease in anamnesis).

Results: There is a significant positive correlation of high-density lipoprotein (HDL) concentrations, and the proportion of patients with low-density lipoprotein (HDL) levels above the reference values, with SS II percutaneous coronary intervention (PCI) (median 46.3; P = 0.04). The participants with lower LDL values have significantly elevated SS II coronary artery bypass graft (CABG) values (median 35.5; P = 0.04), but not SS II PCI. There is no significant correlation of total cholesterol and triglycerides with SS II PCI or SS II CABG. The participants with hyperuricemia have a significantly higher value of SS II PCI (median 43.7; P = 0.04), but not SS II CABG. Diabetes as a comorbidity is present in 32 (44%) participants who have a significantly elevated SS II PCI (median 43.4; P = 0.03), but not SS II CABG in comparison with non-diabetic participants.

Conclusion: SS II is associated with some of the classic risk factors for atherosclerosis (uric acid, diabetes), while in our group of participants there is a surprising correlation of SS II with high HDL levels and low LDL levels.

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LITERATURE

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