

Kardiovaskularni rizični čimbenici i neželjeni kardiovaskularni događaji nakon transplantacije jetre i bubrega

Cardiovascular risk profile and adverse events in renal and liver transplant recipients

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KLJUČNE RIJEČI: kardiovaskularni čimbenici rizika, transplantacija jetre, transplantacija bubrega.

KEYWORDS: cardiovascular risk factors, liver transplantation, renal transplantation.

CITATION: *Cardiol Croat.* 2018;13(11-12):315. | <https://doi.org/10.15836/ccar2018.315>

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Uvod: Prisutnost kardiovaskularnih (KV) rizičnih čimbenika i KV bolesti prije transplantacije jetre ili bubrega povezana je s većom incidencijom neželjenih KV događaja nakon transplantacije^{1,2}. Studije koje uspoređuju pretransplantacijski KV status i KV ishode između ove dvije populacije bolesnika nedostaju. Cilj ovog istraživanja je usporediti KV rizične čimbenike, ehokardiografske parametre i prethodne KV bolesti između populacije bolesnika s transplantiranom jetrom i bubregom te istražiti razlike u kratkoročnim i dugoročnim neželjenim KV događajima.

Bolesnici i metode: U studiju je uključeno 99 bolesnika s transplantiranim bubregom i 220 bolesnika s transplantiranim jetrom. Bolesnici su transplantirani u Kliničkoj bolnici Merkur, a vrijeme praćenja je bilo 27 mjeseci. Podaci su prikupljeni iz informatičke baze podataka Kliničke bolnice Merkur. Praćeni su neželjeni KV događaji nakon transplantacije: smrt, infarkt miokarda i moždani udar.

Rezultati: Bolesnici s transplantiranim bubregom su bili mlađi (54,7 vs 59,3 godine, $p = 0,014$), imali su veću prevalenciju arterijske hipertenzije (81,6% vs 52,6%; $p < 0,001$) i hiperlipidemije (67,5% vs 43,8%; $p < 0,001$). Ehokardiografski parametri ukazuju na značajno veću redukciju dijasboličke funkcije kod bolesnika s transplantiranim bubregom ($p = 0,035$), dok je kod bolesnika s transplantiranim jetrom zabilježena veća prevalencija trikuspidalne regurgitacije (76,1% vs 53,6%; $p = 0,04$). Bolesnici s transplantiranim bubregom imali su veću prevalenciju prethodno preboljelog infarkta miokarda (7,9% vs 3,1%; $p = 0,008$), perkutane koronarne intervencije (9,6% vs 1,8%; $p < 0,001$) i periferne arterijske bolesti (21,9% vs 6,2%; $p < 0,001$). Nije bilo značajne razlike u neželjenim KV događajima unutar 30 dana (4,2% vs 10,9%; $p = 0,20$) kao niti nakon 30 dana po transplantaciji (5,4% vs 8,1%; $p = 0,31$).

Zaključak: Bolesnici s transplantiranom jetrom i bubregom značajno se razlikuju prema prisutnosti KV rizičnih čimbenika, ehokardiografskih parametara te KV bolesti prije transplantacije. No, nismo prikazali značajnu razliku u ranim i kasnim štetnim KV događajima u ove dvije populacije bolesnika.

Introduction: The presence of cardiovascular (CV) risk factors or established CV disease before transplantation is associated with increased adverse events in both renal and liver transplant recipients^{1,2}. Studies comparing pretransplant CV status and CV outcomes of those two population groups are generally lacking. Therefore, we compared those two groups according to pretransplant CV risk status, echocardiographic abnormalities and established CV disease. Differences in short-term and long term adverse cardiac events were further studied.

Patients and Methods: We consecutively enrolled 99 renal and 220 liver patients transplanted at Merkur University Hospital, Zagreb. Follow up period was up to 27 months. The data were collected from institutional computer system. Major adverse cardiac events (MACE) during follow up were defined as death, myocardial infarction (MI) or stroke.

Results: Renal transplant recipients were younger (54.7 vs 59.3 years; $p=0.014$) and showed higher prevalence of hypertension (81.6% vs 52.6%; $p<0.001$) and hyperlipidemia (67.5% vs 43.8%; $p<0.001$). Echocardiographic parameters revealed significantly reduced diastolic function ($p=0.035$) in renal patients. Liver patients had more tricuspid valve regurgitation (76.1% vs 53.6%; $p=0.04$). Renal recipients had higher prevalence of previous MI (7.9% vs 3.1%; $p=0.008$), percutaneous coronary intervention (9.6% vs 1.8%; $p<0.001$) and peripheral artery disease (21.9% vs 6.2%; $p<0.001$). No differences in MACE, when renal patients were compared to liver patients, was found up to 30 days (4.2% vs 10.9%; $p=0.20$) and beyond 30 days (5.4% vs 8.1%; $p=0.31$) following transplantation.

Conclusion: Renal and liver transplant recipients differ significantly in pretransplant presence of CV risk factors, echocardiographic parameters and established CV disease. Yet, we could not find any differences in both early and late MACE in those two groups.

RECEIVED:
October 25, 2018

ACCEPTED:
November 5, 2018



LITERATURE

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