Povezanost ehokardiografskog nalaza prije transplantacije s postoperativnim ishodima nakon transplantacije jetre i bubrega

Preoperative echocardiographic findings and posttransplant outcomes in liver and kidney transplant patients

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UVOD: Ehokardiografija je dio standardne preoperativne procjene potencijalnih kandidata za transplantaciju jetre (LT) i bubrega (RT). Patološki nalazi, iako povezani s preživljenjem u neposrednom perioperativnom periodu, nedovoljno su istraženi kao dugoročni markeri povećane incidencije nepovoljnih događaja.[1,2] Cilj: Istražiti poveznicu između blage do teške trikuspidne regurgitacije, aortne stenoze, mitralne regurgitacije (MR) i smrtnosti, preživljenja grafta i učestalosti kardiovaskularnih incidenata u transplantiranih bolesnika.

Bolesnici i metode: Podaci o 219 uzastopnih bolesnika s transplantiranom jetrom i 115 uzastopnih bolesnika s transplantiranim bubregom prikupljeni su i analizirani. Podaci su uključivali parametre sa zadnjeg ehokardiografskog nalaza prije transplantacije, duljinu preživljenja bolesnika i grafta, uzroke smrti i kardiovaskularne (CV) incidente (moždani udar, infarkt miokarda) u postoperativnom razdoblju. Bolesnici kojima je transplantirano više različitih organa te oni izvan kontrole ili s nepotpunim ehokardiografskim nalazom isključeni su iz analize. Preživljenje bolesnika definirano je kao razdoblje od transplantacije do zadnje kontrole ili smrti, a preživljenje grafta od transplantacije do zadnje kontrole, smrti ili ponovne transplantacije.

Rezultati: 199 LT i 106 RT zadovoljilo je navedene kriterije. Srednje razdoblje praćenja bilo je 376 ± 231 odnosno 518 ± 237 dana. Ukupno preživljenje za LT bilo je 83,4%, a za RT 94,3%. Najčešći razlog smrti nakon LT bila je sepsa, dok su uzroci za preminule bolesnike s transplantiranim bubregom bili podjednako raspoređeni. Značajna razlika pronađena je samo u ukupnom preživljenju za LT MR (79,1%) i ne-MR (94,6%) skupine (log rank, p=0.013). Nije bilo značajne korelacije između CV incidenata i analiziranih parametara.

Zaključak: U ovoj studiji nalaz blage do teške MR u bolesnika s transplantiranom jetrom povezan je s višim dugoročnim mortalitetom. Značaj predtransplantacijskog nalaza ehokardiografije pri određivanju rizika za nepovoljne ishode nakon transplantacije treba dodatno istražiti u studijama s većim uzorkom.

Background: Echocardiography is performed as part of preoperative evaluation of liver (LT) and kidney (RT) transplant recipients. Pathological findings, although associated with survival in the immediate perioperative period, have received less attention as markers of increased incidence of adverse outcomes in the long term.[1,2] Aim: To establish the association of ≥ mild tricuspid regurgitation, mitral regurgitation (MR) and aortic stenosis with mortality, graft survival and posttransplant cardiovascular adverse events in kidney and liver transplant recipients.

Patients and Methods: Retrospectively collected data from 219 liver and 115 kidney transplant patients included parameters from one echocardiogram at a single-time point closest to transplantation, patient and graft survival periods, cause of death and CV events in the postoperative period (stroke and MI). Multiple organ transplants, patients lost to follow-up or with incomplete echocardiographic findings were excluded. Patient survival was defined as time from transplantation to death or last follow-up and graft survival as time from transplantation to last follow-up, death or re-transplantation.

Results: 199 LT and 106 RT patients met the inclusion criteria with median follow up 376±231 and 518±237 days respectively. Overall survival rate was 83.4% for LT and 94.3% for RT. Predominant cause of death was sepsis (43.8%) for LT while different causes of death were equally distributed between RT patients. Significant difference was found only for overall survival in MR (79.1%) and non-MR (94.6%) LT patient groups (log rank, p=0.013). No significant correlation was found between CV event incidence and any of the analyzed parameters.

Conclusion: In our study, MR was found to be associated with long-term posttransplant mortality in LT patients. The significance of echocardiography in risk-stratification for posttransplant outcomes in RT and LT is yet to be definitively determined in larger sample studies.

LITERATURE

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