

Sigurnost stentiranja karotidne arterije bez protekcije – iskustvo jednog centra

Safety of nonprotected carotid artery stenting – a single centre experience

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Uvod: S pažljivim odabirom pacijenata i multidisciplinarnim pristupom, stentiranje karotidne arterije je pokazalo sličan rizik i dobit, kao i endarterektomija karotidne arterije. Angioplastika aterosklerotičnog plaka je najvažniji korak tijekom stentiranja karotidne arterije jer nosi rizik otpuštanja emboličkog sadržaja iz plaka u intrakranijsku cirkulaciju. Distalna protekcija tijekom stentiranja je razvijena da bi spriječila moždani udar kao jednu od težih komplikacija zahvata. Zbog nekonkluzivnih rezultata njihove učinkovitosti u nekim od glavnih studija te drugim komplikacijama koje se teoretski mogu desiti prilikom otpuštanja takvog materijala velika je razlika u učestalosti njihovog korištenja među različitim operaterima.¹ Cilj ove studije nam je bio usporediti incidenciju klinički signifikantnog moždanog udara kod pacijenata kod kojih je učinjeno stentiranje karotidne arterije s korištenjem distalne protekcije te kod pacijenata koji su imali isti zahvat bez korištenja protekcije.

Pacijenti i metode: Retrospektivno smo analizirali podatke pacijenata koji su bili endovaskularno liječeni zbog stenoze karotidne arterije na našem odjelu od 2006. do 2016. godine te tražili kliničke dokaze moždanog udara koji bi se mogli pripisati zahvatu. Tijekom tog vremena bilo je 335 stentiranja karotidne arterije zbog aterosklerotične stenoze, s 94 zahvata sa te 241 zahvatom bez distalne protekcije.

Rezultati: Nismo našli signifikantnu razliku u periproceduralnom moždanom udaru u dvije skupine naših pacijenata.

Zaključak: Iako je naša studija retrospektivno istraživanje parova, prikazali smo sigurnost našeg trenutnog protokola za stentiranje karotidne arterije koji ne uključuje distalnu protekciju za sve pacijente.

Introduction: With careful patient selection and multidisciplinary approach, carotid artery stenting (CAS) showed similar risks and benefits as carotid artery endarterectomy (CEA). Angioplasty of atherosclerotic plaque is the most important step during the CAS because it bears the risk of releasing plaque debris into the intracranial circulation. Distal embolic protection devices were developed to prevent stroke as one of the major complications during the procedure. Due to non-conclusive results of their efficiency in some of major trials and other complications that can theoretically occur during employment of such devices there are large differences in frequency of their use among operators.¹ Objective of this study was to compare incidence of clinical evident stroke in early postprocedural period in patients who had CAS with distal embolic protection with patients who had the same procedure without distal embolic protection.

Patients and Methods: We retrospectively analyzed data of patients that were endovascularly treated for carotid artery stenosis in our department from 2006 to 2016, and searched for clinical evidence of stroke that could be attributed to the procedure. During that period there was 335 CAS procedures for atherosclerotic stenosis, with 94 procedures with and 241 without distal embolic protection.

Results: We found no significant difference in periprocedural stroke incidence in two groups of our patients.

Conclusion: Although our study is retrospective case-control study we displayed safety of our current CAS protocol which does not include distal embolic protection for all patients.

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LITERATURE

1. Ringleb PA, Kunze A, Allenberg JR, Hennerici MG, Jansen O, Maurer PC, et al; Steering Committee of the SPACE Study. The Stent-Supported Percutaneous Angioplasty of the Carotid Artery vs. Endarterectomy Trial. *Cerebrovasc Dis.* 2004;18(1):66-8. DOI: <http://dx.doi.org/10.1159/000078752>