

Sigurnost i efikasnost transradijalnog pristupa u perifernim vaskularnim intervencijama

Safety and efficiency of the transradial approach in the peripheral vascular interventions

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Uvod: U Kliničkom bolničkom centru Sestre milosrdnice transradijalni pristup tradicionalno koristi kao vaskularni pristup za periferne vaskularne intervencije.¹ Kao što smo pokazali u ranijim izvještajima, transradijalni je pristup jednak siguran kao i transfemoralni uz manje komplikacije i kraćom potrebnom hospitalizacijom. Cilj ovog rada bio je odrediti sigurnost transradijalnog pristupa i usporediti tehničke parametre (vrijeme fluoroskopije, doze radijacija i volumen utrošenog kontrasta) među skupinama gdje je transradijalni pristup korišten kao glavni ili kao dodatni pristup za periferne vaskularne intervencije s poznatim literaturnim podacima ta transfemoralni pristup.

Pacijenti i metode: U razdoblju između siječnja 2011. i rujna 2016. godine u KBC Sestre milosrdnice na Klinici za bolesti srca i krvnih žila učinjeno je 120 dijagnostičkih ili intervencijskih procedura koristeći transradijalni pristup. 74 bolesnika su bili muškarci (62 %), 31 je bolovao od šećerne bolesti tipa 2 (26 %) dok je 85 bilo aktivnih pušača (71 %).

Rezultati: U 34 procedure (većinom kod bolesnika s lezijama tipa TASC B ili C) transradijalni pristup korišten je kao jedan od dodatnih pristupa za intervenciju (prosječni volumen kontrasta po proceduri 156 ml; srednje vrijeme fluoroskopije 17 min, doza zračenja 5286 mcGym2). U 13 slučajeva transradijalni pristup korišten je kao glavni pristup za intervenciju, većinom kod bolesnika s lezijom tipa TASC A ili B (prosječni volumen kontrasta po proceduri 146 ml; srednje vrijeme fluoroskopije 9 min; doza zračenja 5606 mcGym2). Kod 70 bolesnika je transradijalni pristup korišten u dijagnostičke svrhe (prosječni volumen kontrasta po proceduri 176 ml, srednje vrijeme fluoroskopije 8,2 min, doza zračenja 2332 mcGym2). U 36 procedura (30 %) koronarna angiografija učinjena je tijekom procedure na periferiji što je moglo značajnije utjecati na prikazane rezultate.

Zaključak: Ovaj izvještaj pokazuje korisnost transradijalnog pristupa u perifernim intervencijama. Zabrinutost oko sigurnosti zbog izloženosti zračenju ne bi smjelo obeshrabriti operatera u korištenju transradijalnog pristupa u perifernim vaskularnim intervencijama.

Objective: In University Hospital Centre «Sestre milosrdnice» Zagreb transradial approach is traditionally used as a vascular approach for peripheral transluminal interventions.¹ As shown in our previous reports transradial approach is found to be as safe as the transfemoral but with less complications and with shorter postprocedural hospitalization needed. The aim of the study was to determine the safety of the transradial approach and to correlate technical parameters (fluoroscopy time, radiation doses and the volume of contrast) between the group where the transradial approach was used as a single or as an additional approach for peripheral interventions and in transfemoral group.

Methods: Between January 2011 and September 2016 at the UHC «Sestre milosrdnice», Zagreb at the Department of Cardiovascular Diseases 120 diagnostic and interventional procedures were performed using the transradial approach. There were 74 men (62%), 31 (26%) suffered from diabetes mellitus type II and 85 (71%) were active smokers.

Results: In 34 procedures (mostly in patients with TASC B or C lesions) the transradial approach was used as one of the additional approaches for the intervention (average volume of used contrast per procedure 156 ml; mean fluoroscopy time 17 min; radiation doses 5286 mcGym2). In 13 cases the transradial approach was the main approach for the intervention, mostly in patients with TASC A or B type of lesions (average volume of used contrast per procedure 146 mL; mean fluoroscopy time 9 min; radiation doses 5606 mcGym2). In 70 patients the transradial approach was used for diagnostic angiography (average volume of used contrast/procedure 176 mL; mean fluoroscopy time 8,2 min; radiation doses 2332 mcGym2). In 36 procedures (30%) coronary angiography was performed during the same procedure which could have influenced the results.

Conclusion: This report shows feasibility of transradial approach for peripheral interventions. Concerns about safety due to radiation exposure and fluoroscopy time should not discourage operators from using the transradial approach for peripheral interventions.

LITERATURE

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