

Endovaskularno liječenje aneurizme abdominalne aorte: analiza jednog centra

Endovascular aneurysm repair in treatment of abdominal aortic aneurysm: a single-center analysis

Dražen Perkov*,
Mladen Petrunić,
Damir Halužan,
Ivica Sjekavica,
Majda Vrkić Kirhmajer,
Ljiljana Banfić

Medicinski fakultet
Sveučilišta u Zagrebu, Klinički
bolnički centar Zagreb,
Zagreb, Hrvatska

University of Zagreb School of
Medicine, University Hospital
Centre Zagreb, Zagreb, Croatia

KLJUČNE RIJEČI: endovaskularno liječenje aneurizme, aneurizma abdominalne aorte.

KEYWORDS: endovascular aneurysm repair, abdominal aortic aneurysm.

CITATION: *Cardiol Croat.* 2018;13(11-12):452. | <https://doi.org/10.15836/ccar2018.452>

***ADDRESS FOR CORRESPONDENCE:** Dražen Perkov, Klinički bolnički centar Zagreb, Kišpatičeva 12, HR-10000 Zagreb, Croatia. / Phone: +385-98-266-724 / E-mail: drazen.perkov@outlook.com

ORCID: Dražen Perkov, <https://orcid.org/0000-0001-5398-059X> • Damir Halužan, <https://orcid.org/0000-0002-8587-8351>
Majda Vrkić Kirhmajer, <https://orcid.org/0000-0002-1340-1917> • Ljiljana Banfić, <https://orcid.org/0000-0002-4538-8980>

Cilj: Prikazati rezultate nakon endovaskularnog liječenja aorte (EVAR) zbog aneurizme abdominalne aorte (AAA) u jednom centru.

Bolesnici i metode: Ukupno je analizirano 34 bolesnika s dijagnozom AAA liječenih metodom EVAR-om u Kliničkom bolničkom centru Zagreb od lipnja 2015. do rujna 2018. godine. U istraživanoj skupini bolesnika bilo je 31/34 (91%) muškaraca i 3/34 (9%) žena s prosječnom dobi od 73,7 ± 7,4 (raspon 55-87 godina). Primarni ishod istraživanja bio je tehnički uspjeh EVAR-a (uspješna implantacija) i smrtnost podrijetla svih uzroka. Sekundarni ciljevi su bili komplikacije EVAR-a, duljina boravka u jedinici intenzivnog liječenja (JIL) i preživljavanje bolesnika. Za analizu podataka korištene su deskriptivne statističke metode.

Rezultati: Srednji promjer liječenih AAA bio je 62,1 ± 12 (raspon 43-98 mm). Stopa tehničkog uspjeha bila je 94% (32/34) za implantaciju stent-graft sustava. U jednog bolesnika nije učinjena implantacija zbog širokog i izrazito anguliranog vrata AAA, a jedan bolesnik imao je rupturu vanjske zdjelične arterije. U praćenju smo zabilježili 2/32 (6%) smrtnih slučajeva u skupini bolesnika s uspješno ugrađenim stent graftom, a uzroci smrti nisu bili povezani s AAA i EVAR postupkom. Najčešća komplikacija nakon uspješnog EVAR postupka bio je "endoleak" tipa II u 11/32 (34%) bolesnika, bez potrebe za ponovnom intervencijom. Prosječna dužina boravka u JIL-u bila je 1,08 dana. U bolesnika s EVAR-om preživljavanje je bilo 19 ± 11 (u rasponu od 1 do 40 mjeseci) nakon postupka.

Zaključci: EVAR u liječenju AAA je tehnički izvediv i siguran, s prihvatljivom učestalosti komplikacija i s vrlo kratkim boravkom bolesnika u JIL-u nakon postupka. Kako bi se spriječile komplikacije, potreban je izniman oprez pri odabiru bolesnika koji su anatomski prikladni za EVAR postupak.¹

Objective: To evaluate the outcome after endovascular aortic repair (EVAR) of abdominal aortic aneurysms (AAA) in single center.

Patients and Methods: A total of 34 patients diagnosed with AAA treated by EVAR in University Hospital Centre Zagreb from June 2015 to September 2018 were followed-up and analyzed. There were 31/34 (91%) male and 3/34 (9%) female patients, with a mean age of 73.7±7.4 (range 55-87 years) in this study group. The primary outcome of the study was EVAR technical success (successful implantation) and all-cause mortality. Secondary endpoints were complications, length of stay in the ICU, and patient survival. Descriptive statistics were used to analyze the data.

Results: Mean diameter of treated AAAs was 62.1±12 mm (range 43-98 mm). Technical success rate were 94% (32/34) for implantation stent-graft system. In one patient we failed to perform implantation because of wide and angulated AAA neck, and one patient had external iliac artery rupture. In the follow-up period we recorded 2/32 (6%) deaths in the group of successfully implanted patients who were not related to AAA and EVAR procedure. Most common complication after successful EVAR procedure were endoleak type II in 11/32 (34%) patients, without the need for reintervention. Average length of stay in ICU was 1.08 day. In patients with EVAR mean survival was 19±11 months (range from 1 to 40 months) after procedure.

Conclusions: EVAR treatment for AAA is technically feasible and safe, with acceptable complications risks and with very short length stay in ICU after procedure. In order to prevent complications, extreme caution is needed when selecting patients who are anatomically suitable for the EVAR procedure.¹

RECEIVED:
October 26, 2018

ACCEPTED:
November 5, 2018



LITERATURE

1. United Kingdom EVAR Trial Investigators, Greenhalgh RM, Brown LC, Powell JT, Thompson SG, Epstein D, et al. Endovascular versus open repair of abdominal aortic aneurysm. *N Engl J Med.* 2010 May 20;362(20):1863-71. <http://doi.org/10.1056/NEJMoa0909305>