

CRT-200.18

Percutaneous Angioplasty versus Atherectomy-assisted Interventions for Treatment of Symptomatic Infringuinal Arterial Disease



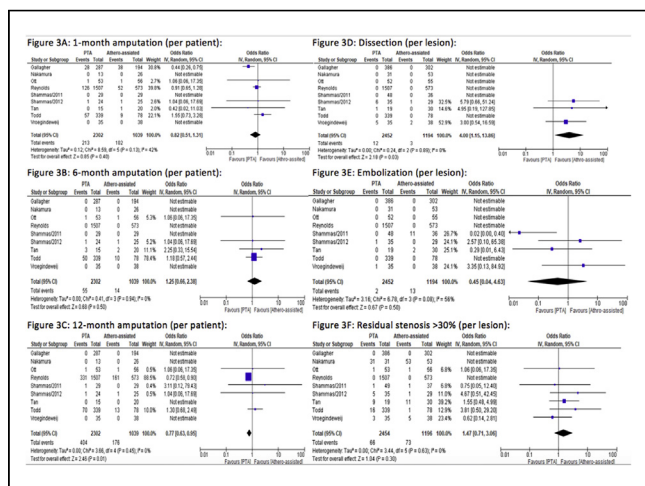
Obai Abdullah, 1 Jad Omran, 2 Tariq Enezate, 1 Jihad Mustapha, 3 Fadi Saab, 3 Arun Kumar, 1 Nicolas Shammam, 4 Ashraf Al-dadah 5 1University of Missouri-Columbia, Columbia, MO; 2University of California-San Diego, San Diego, CA; 3Metro Health Hospital, Wyoming, MI; 4Midwest Cardiovascular Research Foundation, Davenport, IN; 5Prairie Cardiovascular Consultants, Springfield, IL

BACKGROUND Atherectomy (ATHRO) role for treatment of symptomatic infringuinal arterial lesions is controversial. In this study, we aim to evaluate the effectiveness and safety of atherectomy-assisted endovascular interventions in comparison with percutaneous angioplasty (PTA).

METHODS Medline, PubMed and the Cochrane Central Register of Controlled Trials were queried from February 1995 through May 2017. Only studies comparing ATHERO with PTA were included. Study endpoints included: embolization, residual stenosis (>30%), and amputation rates at 1, 6, and 12 months, as well as vessel dissection.

RESULTS A total of 3344 patients (mean 70.29 years; 62.9% male) were included from 9 studies (5 prospective randomized and 4 retrospective) comparing ATHERO with PTA. There was no significant difference between the two approaches in terms of embolization [OR 0.45 with 95% CI 0.04 to 4.63] or residual stenosis [OR 1.47 with 95% CI 0.71 to 3.06]. Outcomes did not differ in terms of limb amputation at 1 month [OR 0.82 with 95% CI 0.51 to 1.31] or 6 months [OR 1.25 with 95% CI 0.66 to 2.38]. However, at 12 months, amputation rates were less likely to occur with PTA [OR 0.77 with 95% CI 0.63 to 0.95]. Vessel dissection was less likely to occur with ATHERO [OR 4.00 with 95% CI of 1.15 to 13.86].

CONCLUSION In patients undergoing infringuinal endovascular interventions, incidence of amputation at 12 months occurred less frequently with PTA when compared with ATHERO. Vessel dissection was less likely to occur with ATHERO. Both modalities yielded similar outcomes in terms of residual stenosis, embolization, and limb amputation at 1 and 6 months.



CRT-200.19

Ostial Superficial Femoral Artery Disease: Is Stenting the Best Strategy?



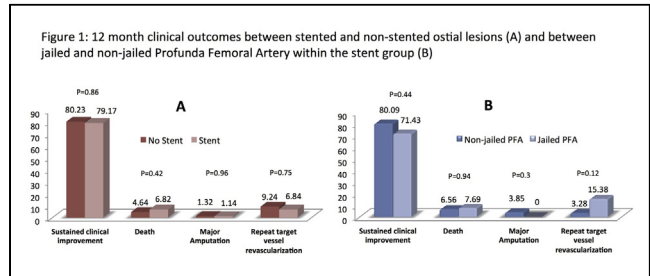
Bassel Bou Dargham, 1 Ishita Tejani, 1 Amutharani Baskar, 2 Shirling Tsai, 1 Bala Ramanan, 1 Houman Khalili, 1 Nicolas W. Shammam, 3 Emmanouil S. Brilakis, 4 Subhash Banerjee 1 1University of Texas Southwestern Medical Center, Dallas, TX; 2Veterans Affairs North Texas System Dallas Texas, Dallas, TX; 3Midwest Cardiovascular Research Foundation, Davenport, IA; 4Center for Advanced Coronary Interventions at the Minneapolis Heart Institute, Minneapolis, MN

BACKGROUND There is significant uncertainty regarding stent or non-stent endovascular treatment of symptomatic peripheral artery disease involving the ostium of the superficial femoral artery (SFA).

METHODS One hundred eighty-two patients with ostial SFA intervention were selected from the multicenter Excellence of Peripheral Artery Disease (XLPAD) registry. Non-parametric tests were performed to test group differences in patients' baseline characteristics, periprocedural complications, and midterm outcomes between stented and non-stented lesions.

RESULTS Fifty-three percent of patients had a stent placed in the ostial SFA. Both groups had similar baseline characteristics. Profunda Femoral Artery (PFA) jailing occurred in 29% of the stent group. There were no significant differences in periprocedural complication rates. At 12-month follow-up, clinical outcomes, including sustained clinical improvement (freedom from death, endovascular or surgical revascularization, and amputation) and target vessel revascularization (TVR) were similar between groups (Figure 1). TVR rates were numerically higher in the jailed PFA subgroup compared with the non-jailed PFA subgroup (15.38% vs. 3.28%, p=0.12) (Figure 1).

CONCLUSION While stented ostial SFA lesions showed similar 1-year clinical outcomes to non-stented lesions, there was a strong trend for higher TVR with jailed PFA with stent. These results also indicate the feasibility of a non-stent approach to ostial SFA lesions.



RENAL INTERVENTION

CRT-200.21

Alcohol-mediated Renal Denervation to Treat Hypertension-The Peregrine Post-market Study



Stefan C. Bertog, 1 Horst Sievert, 1 Mariusz Hochul, 2 Wojciech Wojakowski, 3 Jean Renkin, 4 Alexandre Persu, 5 Roland Schmieder, 6 Markus Van der Giet, 7 Maximilian De BuCourt, 8 Andreas Zirlik, 9 Petr Neuzil, 10 Nicole Haratani, 11 Helen Parise, 11 Tim Fischell, 11 Felix Mahfoud 12 1Cardiovascular Center, Frankfurt, Germany; 2American Heart of Poland, Tychy, Poland; 3Medical University of Silesia, Katowice, Poland; 4Cliniques Universitaires, Brussels, Belgium; 5Université Catholique de Louvain, Brussels, Belgium; 6Friedrich-Alexander University Erlangen-Nuremberg, Nuremberg, Germany; 7Charite, Berlin, Germany; 8Department of Radiology Charité - University Medicine, Berlin, Germany; 9University Heart Center, Freiburg, Germany; 10Homolka Hospital, Prague, Czech Republic; 11Ablative Solutions Inc., Palo Alto, CA; 12University Medical Center Homburg, Homburg, Germany

BACKGROUND The Peregrine post-market study is a prospective, single-arm, open label, multicenter European trial evaluating the safety and performance of the Peregrine System™ Infusion Catheter (Ablative Solutions Inc., Palo Alto, CA, USA) to perform chemical