

MP-1 2-years clinical outcome of drug coated balloon for femoropopliteal lesions in real world

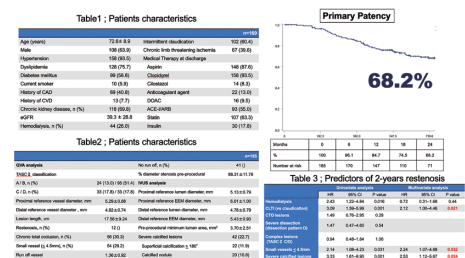
○Suguru Ebihara, Kenji Ogata, Keisuke Yamamoto, Yoshisato Shibata
Miyazaki Medical Association Hospital

【What's known?】

Some clinical trials have shown the clinical efficacy of drug coated balloon (DCB) for femoropopliteal (FP) lesions. However, the mid-term clinical outcomes of DCB have been still unknown in real world.

【What's new?】

We investigated the clinical efficacy of DCB at 2-years. The present study was a retrospective observational study. Patients who had symptomatic (Rutherford classification 2 to 5) de novo lesions in the FP artery were enrolled. The primary endpoint was primary patency at 2-years. 169 patients (185 lesions) were enrolled. Patients and lesions characteristics were shown in the table. Primary endpoint and outcomes were shown in the figure. Furthermore, independent predictor of primary patency were small vessels (< 4.5mm), chronic threatening limb ischemia (CLTI) and severe calcified lesions. The primary outcome of DCB at 2-years was acceptable. However, DCB was unfavorable to patients with small vessels, CLTI and severe calcified lesions.



MP-2 The Clinical Efficacy of Oral Anticoagulant and Single Antiplatelet Treatment for Patients with stent occlusion After Femoropopliteal Stenting

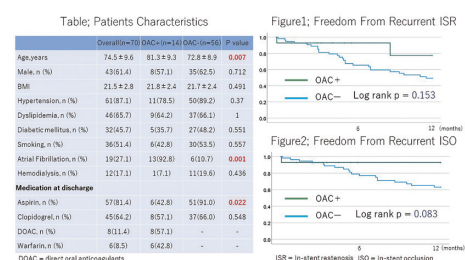
○Keisuke Yamamoto, Suguru Ebihara, Kenji Ogata, Yoshisato Shibata
Miyazaki Medical Association Hospital

【What's known?】

Some clinical trials have shown the efficacy of Self-expanding nitinol stent for femoropopliteal lesions. However, the occurrence of in-stent occlusion has become a serious problem. Furthermore, the patency of stent occlusion with endovascular treatment (EVT) has been poor.

【What's new?】

The aim of this study is to identify the utility of oral anticoagulant treatment (OAC) and single antiplatelet therapy (SAPT) for patients with In-stent occlusion (ISO) after endovascular treatment (EVT) compared with dual antiplatelet treatment. From January 2011 to June 2021, a consecutive 70 patients underwent EVT for ISO were retrospectively enrolled. The primary outcome was the recurrence of the in-stent restenosis (ISR) and secondary outcome was the recurrence of ISO. Consequently, medical treatment with OAC and SAPT for patients with ISO after EVT has possibility to reduce the incidence of recurrence of ISO.



MP-3 A rare case of delayed AV shunt and aneurysm for below the knee

○Eiji Koyama, Kazuki Tobita, Futoshi Yamanaka, Hirokazu Miyashita,
Takayoshi Yamashita, Yusuke Tamaki, Shigeru Saito
Shonan Kamakura General Hospital

【Case overview】

We report a case of a 60-year-old woman with uncontrolled diabetes who presented with non-healing ulcer of the left lower leg.

【Procedure summary】

She diagnosed gas gangrene by computed tomography, and then treated by antibiotic and debridement after admission. Ultrasound and aortography showed severe stenosis under popliteal artery. She did endovascular therapy (EVT) for popliteal artery severe stenosis and posterior tibial artery (PTA) occlusion and got enough blood flow.

【Clinical time course and implication (or perspective)】

But 1 month later, her foot ulcer was not healed, so we did second EVT. Initial angiography showed AV shunt and aneurysm for PTA. EVT for the PTA was necessary to heal ulcer, so we deployed coronary covered stent. Finally, AV shunt and aneurysm for PTA disappeared, and angiogram demonstrated improved blood flow to the wound site. The ulcer healed within a month. We think that coronary covered stent was improved blood flow to wound site by AV shunt and aneurysm for below the knee.

MP-4 Retrograde retrieval using a snare of a detached balloon caused by severe calcification in below-the-knee lesion

○Keisuke Shoji, Kan Zen, Kenji Yanishi, Satoaki Matoba
Kyoto Prefectural University of Medicine

【Case overview】

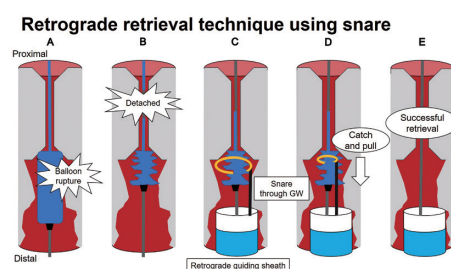
A 66-year-old male with hemodialysis had been suffered from ischemic gangrene in his right toe.

【Procedure summary】

A Parent Plus® 45 was inserted via right common femoral artery and angiography showed total occlusion in anterior tibial artery and posterior tibial artery (PTA) with severe calcification. A bidirectional approach was attempted with distal puncture of PTA and subsequently retrograde guidewire externalization was established. However, a 1.2 mm balloon was ruptured and entrapped by severe calcification. Several antegrade retrieval technique were limited because of small antegrade system. While moving the balloon back and forth, the balloon-shaft broke and the balloon was left behind in the PTA. Therefore, retrograde retrieval technique was performed. Firstly, a Parent Plus® 30 was inserted from retrograde approach site and advanced near the broken balloon. The loop of the Goose Neck snare through the guidewire retrogradely was advanced onto the balloon. Finally, the snare grasped and retrieved the balloon. The severe calcific lesion was flossed carefully by Crosser® catheter and a 2.0 mm balloon was inflated and achieved hemostasis of distal puncture site simultaneously.

【Clinical time course and implication (or perspective)】

This retrograde retrieval technique might be effective when the antegrade retrieval technique fails for device remnants resulting from severe calcified lesions.



MP-5 Comparison of conventional approach and trans ankle approach for peripheral artery disease : propensity score matched analysis at a single center study

○Yuki Matsumoto¹⁾, Takuya Osaki¹⁾, Yoshihiro Morino²⁾

¹⁾Iwate Prefectural Kuji Hospital, ²⁾Iwate Medical University

【What's known?】

Endovascular treatment can now be performed from various approach sites with the development of devices. In the past, approaches from small vessels such as the dorsal and posterior tibial arteries were avoided due to the risk of occlusion or perforation after treatment. However, in recent years, there have been an increasing number of reports of treatment using a single approach from the dorsal or posterior tibial arteries. The diameter of the artery is often 2 mm or larger when confirmed by echocardiography, and the trans-radial approach has become more common in PCI procedures, leading to the use of the trans-ankle approach.

【What's new?】

133 cases performed at the Department of Cardiology, Kuji Hospital from 2009 to November 2021. Trans ankle approach was used in 24 cases, brachial approach in 2 cases, and femoral approach in 107 cases. Lesions below the tibio-peroneal trunk, critical limb ischemia, and acute arterial occlusion were excluded. Retrospective analysis was performed.

MP-6 The Utility of 4D-CTA in Diagnosing Endoleaks after EVAR/TEVAR

○Takahiro Nakai¹⁾, Shigeo Ichihashi¹⁾, Shinichi Iwakoshi¹⁾, Masahiro Inagaki¹⁾,
Satoru Nagatomi²⁾, Toshihiro Tanaka¹⁾

¹⁾Nara Medical University Hospital, ²⁾Department of Diagnostic Radiology, Sumitomo Hospital,

【What's known?】

4D-CTA (CT angiography) is one of novel diagnostic imaging methods using dynamic CT study. Time-dependant data can be obtained additinal to demensional data which was obtained by conventional CTA. Besides, endoleaks are related to sac enlargement after EVAR (endovascular aortic repair)/TEVAR (thoracic endovascular aortic repair). TAE (trans-arterial embolization) and additional stentgraft (SG) implantation tend to perform to eliminate endoleaks. At that time, preoperational imaging is important for accurate diagnosis and treatment. There are no study to evaluate utility of 4D-CTA in diagnosing endoleaks after EVAR/TEVAR.

【What's new?】

Patients who underwent 4D-CTA between April 2019 and December 2020 were enrolled to this study. Location of aneurysm/dissection, pre/post 4D-CTA diagnosis, kind of endoleaks, scan time, CTDIvol (volume CT dose index), DLP (dose linear product), and success of adjunctive procedures such as TAE (trans-arterial embolization), additional SG implantation were evaluated.

18 cases (TAA (thoracic aortic aneurysm)/TAAA (thoracoabdominal aortic aneurysm)/AAA (abdominal aortic aneurysm)/DA (dissecting aneurysm): 2/1/13/2) were enrolled to this study. The diagnostic concordance rate between pre- and post 4D-CTA was 44.4%(8/18). All intended adjunctive procedures (15/18) were successfully performed. CTDIvol and DLP were higher than that indicated in DRLs (diagnostic reference levels, compared to coronary and dynamic liver contrast enhanced CT) 2020 in Japan.

MP-7**Impact of Medial Artery Calcification score on Clinical Outcomes in CLTI with Tissue Loss after Successful Endovascular Intervention for Isolated below the knee lesions**

○Kenji Makino, Masahiro Yamawaki, Norihiro Kobayashi, Shinsuke Mori,
Tsutsumi Masakazu, Yosuke Honda, Shirai Shiemitsu, Toshiki Chishiki,
Masafumi Mizusawa, Kouhei Yamaguchi, Takahide Nakano, Yoshiaki Ito
Saiseikai Yokohama City Eastern Hospital

【What's known?】

CLTI is the clinical manifestation of advanced PAD, presenting with rest pain or tissue loss. Previously report suggested that MAC scores were independently associated with redo surgical or endovascular procedures and MALEs. However, severe MAC score group were significantly lower rate of successful EVT. We investigated impact of MAC score on clinical outcomes in CLTI with Tissue Loss after successful EVT for isolated BK lesions.

【What's new?】

Between April 2007 and April 2017, we enrolled 235 limbs in who received successful EVT for CLTI with tissue loss. MAC were quantified using a 3-level score (0=absent, 1=moderate, 2=severe) based foot radiographs. Based on the MAC score, the 235 limbs were classified as 105 group 0 (44.6%), 39 group 1 (16.6%), and 34 group 2 (14.5%). There was no significant difference between groups about patients' characteristics. Wound healing rate at 12 months was significantly higher in group 0 compared to group 1 and 2 (group 0: 88.5%, group 1: 72.2%, group 2: 76.4%, $P=0.02$). There was not statistically different between group 1 and 2 ($P=0.49$). MAC must be influenced clinical outcomes in CLTI after successful EVT, however, there was no difference in wound healing rate between moderate and severe risk groups in this study.