MP-001 Outcomes of Endoluminal Stent-Grafts Versus Drug-Based Scaffolds in Extremely Long-Stented Lesions (>30cm)

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【What's known?】

Extremely long femoropopliteal lesions remain a major challenge in peripheral artery disease due to high restenosis and reintervention rates. This retrospective single-center study compared endoluminal stent-grafts and drug-based scaffolds in lesions requiring stenting over 30 cm.

【What's new?】

A total of 254 patients were included (stent-grafts = 142; drug-based scaffolds = 112). Mean age was 77 years, 60% were male, and 40% had chronic limb-threatening ischemia. Lesion length (303 mm vs 291 mm, $p = 0.204$) and vessel diameter (6.04 mm vs 6.02 mm, $p = 0.790$) were similar between groups. The stent-graft group had more occlusions (75.4% vs 55.4%) and smaller scaffold diameters (6.0 mm vs 6.6 mm, $p < 0.001$), whereas the drug-based scaffold group required more devices (3.0 vs 2.0, $p < 0.001$). Adjunctive DCB use was comparable. Kaplan–Meier analysis demonstrated no significant difference in primary patency (log-rank $p = 0.954$), and multivariate analysis did not identify any independent predictors of patency loss. In conclusion, among patients with extremely long femoropopliteal lesions requiring extensive scaffolding, clinical outcomes were comparable between endoluminal stent-grafts and drug-based scaffolds, suggesting both are viable options for complex long-segment disease.

MP-002 Efficacy and Safety of Percutaneous VA-ECMO and Impella Decannulation Using Endovascular Balloon Dilation and Perclose Closure Device: Insights from multicenter experience

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【What's known?】

Percutaneous removal of venoarterial extracorporeal membrane oxygenation (VA-ECMO) and Impella cannulas using intravascular balloon dilation combined with the Perclose closure device has demonstrated promising hemostasis outcomes. However, prior studies were limited by small sample sizes.

【What's new?】

This multicenter, retrospective study included consecutive patients undergoing percutaneous VA-ECMO and Impella decannulation at two cardiovascular centers between September 2019 and December 2025. A total of 148 patients who underwent removal with intravascular balloon dilation and the Perclose device were analyzed. The primary endpoint was successful hemostasis; the secondary endpoint was surgical conversion.

The mean age was 67.5 years, and 42% were female. Balloon access routes included distal radial/radial (63%), transfemoral (21%), and transbrachial (16%) approaches. Mean balloon diameter and inflation time were 7.5 mm and 14.9 minutes, respectively; mean total procedure time was 62 minutes. Procedural success was achieved in 98.8% of cases, with no surgical conversions, procedure-related deaths, or postprocedural infections observed.

In conclusion, percutaneous VA-ECMO and Impella decannulation using intravascular balloon dilation with Perclose closure demonstrated high procedural success and excellent safety, supporting its utility as a minimally invasive and reliable strategy for ECMO/Impella removal.

MP-003 Recurrent In-Stent Thrombosis after Iliac Vein Compression Syndrome: A Challenging Case Requiring Multiple Endovascular Interventions in Japan

○Shinya Ichihara, Naoki Hayakawa, Toshiki Tsurumaki, Hiromi Miwa, Yasuyuki Tsuchida, Masanao Inoue, Shunichi Kushida

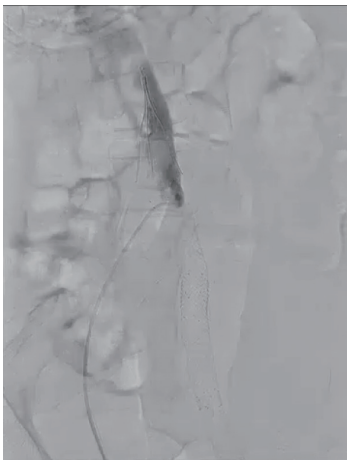
Department of Cardiology, Asahi General Hospital

【Case overview】

An 82-year-old woman with a history of left lower extremity deep venous thrombosis (DVT) secondary to iliac vein compression syndrome presented with recurrent swelling and pain after discontinuing anticoagulation. CT imaging revealed extensive thrombus from the external iliac to popliteal vein. Initial heparin therapy failed, requiring endovascular intervention.

【Procedure summary】

An inferior vena cava filter was placed, followed by balloon fragmentation and manual aspiration thrombectomy. Due to underlying compression and large thrombus burden, arterial bare nitinol stents were deployed from the common iliac to femoral vein. Shortly after, recurrent in-stent thrombosis developed. Repeat intervention was performed, but dislodged thrombus was captured in the filter. Catheter-directed thrombolysis (CDT) with heparin and argatroban was initiated. After CDT dissolved the filter thrombus, final aspiration and additional stenting achieved patency with clinical improvement.



【Clinical time course and implication (or perspective)】

This case demonstrates the complexity of managing recurrent in-stent thrombosis under device limitations in Japan, where mechanical thrombectomy devices and dedicated venous stents are unavailable. Multiple interventions including aspiration thrombectomy, arterial stents, and CDT ultimately provided successful salvage, offering important lessons for acute DVT management in resource-limited settings.

MP-004 A First Case of Successful Bypass Surgery Using a Prosthetic Graft for Left External Iliac Artery Occlusion Caused by External Iliac Artery Endofibrosis

○Shuji Kurata

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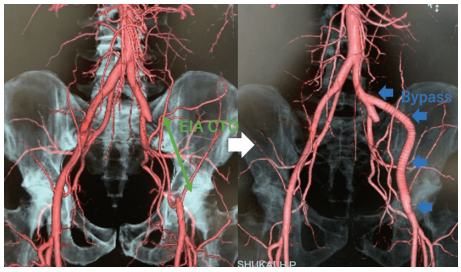
【Case overview】

The patient was a 41-year-old man with no significant medical history and a former member of the Japanese national duathlon team. Thirteen years earlier, he experienced left leg pain during a race and was forced to withdraw. Since then, intermittent claudication had persisted, and although he had been examined by several orthopedic surgeons, the cause remained unidentified. About one year ago, his symptoms worsened, prompting him to visit our hospital. The ABI waveform was flat, and CT revealed occlusion of the left external iliac artery. Further examinations ruled out atherosclerotic, congenital, and acquired thrombotic diseases, leading to the diagnosis of external iliac artery endofibrosis, a rare condition observed in athletes.

【Procedure summary】

As a treatment strategy, EVT, thrombectomy, and patch angioplasty were considered; however, a left CIA–CFA bypass using a prosthetic graft was deemed the most appropriate option due to its superior reliability and long-term durability, and the procedure was performed.



【Clinical time course and implication (or perspective)】

The surgery was successful and completed without complications. The patient is very satisfied with the outcome.However, careful long-term follow-up is necessary to monitor future outcomes.To our knowledge, this is the first reported case of bypass surgery for external iliac artery endofibrosis in Japan.

MP-005 Usefulness of the Wingman Crossing Catheter for Severely Calcified Peripheral Arterial Lesions With Device-Passage Failure: A Single-Center Experience

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Tsukuba Medical Center Hospital

【What's known?】
Severely calcified peripheral arterial lesions may allow guidewire passage but still prevent the advancement of subsequent devices, resulting in device passage failure during endovascular therapy. This issue is frequently encountered in femoropopliteal and below-the-knee interventions. Even high-deliverability small-diameter balloons and microcatheters may fail to cross when severe calcification is present, leading to procedural failure. In such situations, an additional tool to facilitate device passage is required to complete revascularization. The Wingman crossing catheter, featuring a needle-like, uniquely beveled tip designed to create an entry pathway through tight calcified segments, has been used to address this problem; however, clinical evidence specifically focused on its role in device-passage failure despite successful wire crossing has remained limited.

【What's new?】
In this single-center retrospective study including 79 patients with 81 severely calcified lesions, the Wingman crossing catheter achieved successful device passage in 74 of 79 cases (94%) after failure of devices to cross despite wire passage. Wingman enabled device advancement even when these devices were unable to traverse the lesion due to severe calcification. These findings clarify the clinical role of Wingman as a practical adjunct specifically for device-passage failure and support its use as a real-world solution to a clinically significant challenge in endovascular therapy.

MP-006 Endovascular Treatment Strategies for Acute Upper Limb Arterial Occlusion: A Three-Case Series

○Hideaki Aihara, Yui Takaiwa, Shunsuke Maruta
Tsukuba Medical Center Hospital

【Case overview】
We report three cases of acute hand ischemia resulting from axillary to brachial artery occlusion, primarily caused by thromboembolism in patients with chronic atrial fibrillation. All patients (aged 55-89 years, two females) presented with acute onset of pain, sensory loss, and motor impairment, with a time from symptom onset to treatment of approximately 3–6 hours. One patient had anticoagulation interrupted prior to onset, while the other two developed occlusion despite being on therapeutic anticoagulation. Distal radial and ulnar artery occlusions observed during the procedures were considered secondary distal embolization from the proximal thrombus.

【Procedure summary】
Endovascular therapy via a common femoral artery approach was attempted in all cases using a 6Fr-75cm Crossroad sheath and a 6Fr-100cm guiding catheter. Repeated thrombus aspiration was performed, with adjunctive balloon dilation and vasodilator infusion. In one patient with a greater height, catheter reach was insufficient, and surgical conversion was performed.

【Clinical time course and implication (or perspective)】
Two cases achieved flow restoration, while one required surgical management. Our experience suggests that patients up to 160cm in height may be suitable for endovascular treatment using a 75cm system, whereas taller patients may require longer devices or early surgical consideration. Tourniquet-assisted proximal flow control may help reduce distal embolization during aspiration.

MP-007 Comparison of Clinical Outcomes Between Rheocarna and Hyperbaric Oxygen Therapy in Dialysis Patients With No-Option Chronic Limb-Threatening Ischemia

○Riho Suzuki[1)], Shuko Iwata[2)], Yutaka Dannnoura[1,2)], Michinao Tan[2)], Takao Makino[1)], Hisashi Yokoshiki[1)]

[1)] Sapporo City General Hospital, [2)] Caress Memorial Hospital

【What's known?】
In Japan, more than half of patients with chronic limb-threatening ischemia (CLTI) are on dialysis, far exceeding rates in Western countries. Dialysis is associated with poorer outcomes and no-option CLTI, for which adjunctive therapies such as Rheocarna and hyperbaric oxygen therapy (HBO) are used, though comparative evidence is limited.

【What's new?】
This multicenter retrospective study analyzed 80 dialysis patients with no-option CLTI treated with Rheocarna or HBO between June 2019 and August 2024. Rheocarna significantly increased skin perfusion pressure (SPP) and reduced fibrinogen and low-density lipoprotein (LDL)-cholesterol levels, whereas HBO significantly reduced C-reactive protein (CRP) and fibrinogen without affecting SPP. At 1 year, the wound-healing rate was higher with Rheocarna (63.4% vs 39.5%, $p = 0.042$), overall survival was higher with HBO (55.5% vs 88.5%, $p < 0.001$), and major amputation rates were similar (67.0% vs 71.3%, $p = 0.564$). Multivariate analysis identified serum albumin ≥ 3.0 g/dL and Rheocarna as predictors of wound-healing, while age ≥ 70 years and non-ambulatory status were independent predictors of poor survival; HBO was associated with improved survival. In conclusion, Rheocarna was associated with improved wound healing, whereas HBO contributed to better overall survival in dialysis patients with no-option CLTI.

MP-008 Impact of Diabetes on Hyperbaric Oxygen Therapy for Chronic Limb-Threatening Ischemia

○Riho Suzuki[1)], Shuko Iwata[2)], Yutaka Dannoura[1)], Michinao Tan[2)], Takao Makino[1)], Hisashi Yokoshiki[1)]

[1)] Sapporo City General Hospital, [2)] Caress Memorial Hospital

【What's known?】
Most previous studies on hyperbaric oxygen therapy (HBO) have focused on ischemic ulcers in diabetic patients, and few have compared post-HBO outcomes between diabetic and non-diabetic patients with chronic limb-threatening ischemia (CLTI).

【What's new?】
This multicenter retrospective observational study enrolled 139 patients with CLTI who underwent HBO as adjunctive treatment after revascularization between June 2019 and August 2024. In the diabetes group, males were more prevalent (77.9% vs. 37.1%, $p < 0.001$) and heart failure was more common (59.6% vs. 37.1%, $p = 0.03$), whereas non-diabetic patients were more often non-ambulatory (18.3% vs. 37.1%, $p = 0.04$) and had a higher prevalence of non-atherosclerotic disease (6.7% vs. 22.9%, $p = 0.02$).
Amputation-free survival (AFS) was significantly higher in diabetic patients (68.0% vs. 53.0%, $p = 0.04$), while wound healing rate and major amputation did not differ between groups (49.9% vs. 44.8%, $p = 0.14$; 78.4% vs. 65.7%, $p = 0.18$). In multivariate analysis, diabetes remained an independent favorable prognostic factor for AFS (HR 0.47, $p = 0.014$), whereas wound healing did not differ by diabetic status. These findings suggest that diabetic patients may derive greater benefit from HBO therapy.

MP-009 Laser Atherectomy Versus Balloon Angioplasty for Chronic Total Occlusions in Thromboangiitis Obliterans

○Jianming Guo

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【What's known?】

Objective: Thromboangiitis obliterans (TAO) causes severe lower limb ischemia, where conservative management is often insufficient. Endovascular therapy is important, but evidence comparing device efficacy, particularly for excimer laser atherectomy (ELA), is limited.

【What's new?】

This study compared the short-term efficacy and safety of balloon angioplasty versus ELA for long TAO occlusions, and assessed whether laser debulking combined with drug-coated balloons (DCB) offers superior outcomes.

Methods: In this single-center retrospective analysis, 61 patients (62 limbs) with complex TAO occlusions (Oct 2021-Oct 2024) were divided into a balloon group (n=22; DCB=16, POBA=6) and a laser group (n=40; ELA+POBA=31, ELA+DCB=9). Outcomes included technical success, primary patency, target lesion revascularization (TLR), ulcer healing, and limb salvage.

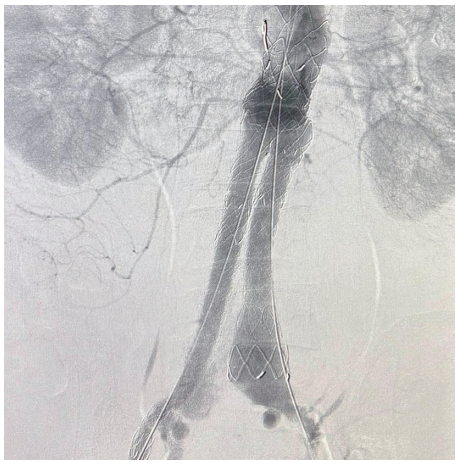
Results: The cohort was 21% claudicant and 79% chronic limb-threatening ischemia. Technical success was high (balloon 95.5% vs laser 97.5%; P> .050). The 12-month primary patency was 48.32% (balloon) vs 59.28% (laser; P= .892), highest in the ELA+DCB subgroup (64.81%). TLR rates were 68.18% vs 75.00% (P= .585). Overall limb salvage was 93.5%. In Rutherford 5 patients, ulcer healing was 81.0%, highest with ELA+DCB (87.5%). The laser group showed lower new ulcer incidence (17.2% vs 30.8%). No serious adverse events occurred.

MP-019 Troubleshooting Jailed Olive Tip in Endovascular Aortic Repair of Impending Rupture Abdominal Aorta Aneurysm

○Salma R. Basuki
Melinda Cardiovascular Center

【Case overview】
A 74-year-old male presented with abdominal discomfort and pulsation for one year. Physical examination revealed a palpable abdominal mass. Ultrasound and CT angiography showed a fusiform infrarenal abdominal aortic aneurysm (AAA) measuring 9.34 cm with signs of impending rupture.

【Procedure summary】
Endovascular Aortic Repair (EVAR) was performed via bilateral femoral access. Initial percutaneous access failed, requiring surgical cutdown. A stent graft was deployed successfully; however, advancement of the ipsilateral limb was complicated by entrapment of the olive tip in the right external iliac artery. Right brachial access and percutaneous transluminal angioplasty enabled successful retrieval. A type IB endoleak at the left limb required an additional extension graft, during which a second olive tip entrapment occurred and was resolved using balloon-anchor technique via brachial access. Final angiography showed only minimal type IV endoleak.



【Clinical time course and implication (or perspective)】
Postoperatively, the patient reported complete resolution of abdominal discomfort, stable vital signs, and no limb ischemia or access complications. This case illustrates that although EVAR is an effective treatment for impending AAA rupture, intra-operative challenges such as access failure, device entrapment, and endoleak may occur. Careful pre-procedure planning, recognition of iliac tortuosity or stenosis, and preparedness for alternative access and bailout techniques are essential for procedural success and patient recovery.

MP-020 Going Out on a Limb: The Distal Transradial Approach for Dialysis Access Intervention

○Asanka R Wijetunga
University of Sydney

【What's known?】
The distal transradial approach (DRA) to arteriovenous fistula (AVF) endoluminal intervention accesses the radial artery via the anatomical snuffbox. The technique aims to optimise sheath stability and reduce rates of periprocedural complication. Though ubiquitous in coronary catheterisation, little data demonstrates its utility in vascular access intervention.

【What's new?】
Our study is the first to aggregate international results - totalling 293 patients from five studies - to demonstrate the promise of the DRA to AVF intervention. The weighted mean age was 72.1 and 91.2% were radiocephalic AVFs. Pooled technical success was 98.6% (95%CI 96.5-99.4%), wih no cases of access-related steal syndrome, major haematoma or pseudoaneurysm. One radial artery occlusion (0.34%, 95%CI 0.06–1.9) and six minor haematomas (2.1%, 95%CI 0.94–4.4) were described, all non-operatively managed. Mean sheath size was 5.8 ± 0.44Fr. Mean procedure time was 55 minutes. Various closure techniques, including Nichiban STEPTY and between 15-120 mins manual pressure have been successfully employed. Six-month primary and secondary patency were 82% and 91% respectively. Larger prospective studies are warranted to validate these findings and define optimal patient selection.

MP-021 Elucidating the technique and evaluating the effectiveness of juxta-anastomotic stenting of the arteriovenous fistula

○Asanka R Wijetunga
University of Sydney

【What's known?】
Juxta-anastomotic stenosis is a common cause of arteriovenous fistula (AVF) dysfunction or failure to mature. While percutaneous transluminal angioplasty (PTA) is the first-line endovascular treatment, its durability is limited, achieving primary patency rates as low as 50% at 12 months. Furthermore, whilst open revision can achieve primary patencies of 80-90% at 12 months, complication rates are high, often at 5-10%. This systematic review and pooled analysis aims to evaluate the efficacy of juxta-anastomotic stenting as a more durable endovascular option.

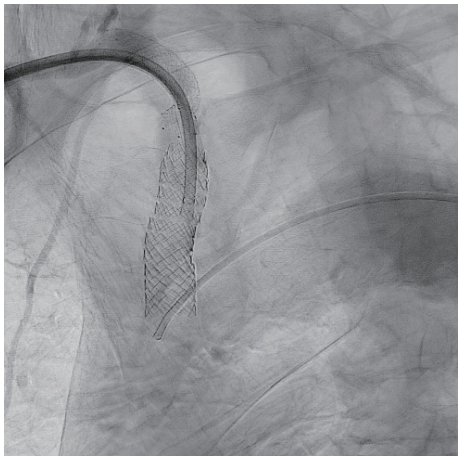
【What's new?】
After reviewing our unit's technique, we describe the results of a a systematic review, which includes nine studies comprising 261 stents placed in 254 radiocephalic and 7 brachiocephalic AVFs. The self-expanding uncovered Supera stent was the most widely used, in over 150 cases. Pooled primary patency rates at 3/6/12/24 months were 93%, 84%, 60%, and 46%, respectively. Pooled primary assisted patency rates were 92%, 90%, 84%, and 72% at the same time points. The overall pooled technical success rate was 99.1%, with no Clavien-Dindo grade III-V periprocedural complications reported. Though these results support its use as an effective adjunct to angioplasty, further work is needed to compare its efficacy to that of open revision.

MP-022 Endovascular Treatment of an Suspected Infectious Brachiocephalic Artery Aneurysm with Concomitant Subclavian Artery Occlusion: A Successful Covered Stent Repair

○Ricky Wang-hei Leung[1)], Takuya Haraguchi[2)]
[1)]Department of Medicine, Queen Mary Hospital, [2)]Sapporo Cardiovascular Clinic

【Case overview】
A 70-year-old man with a history of rectal cancer surgery in July 2025, presented with pleuritic chest pain and pharyngeal discomfort. CT revealed a newly developed brachiocephalic artery aneurysm (33 × 35 mm) and right subclavian artery occlusion, which were absent on CT three months earlier. Laboratory tests showed elevated WBC and CRP, suggesting a possible infectious aneurysm.
He was transferred to our center for EVT after initial antibiotic therapy.

【Procedure summary】
Bilateral access was obtained via the right femoral artery (7 Fr) and right brachial artery (8 Fr).
IVUS-guided bidirectional wiring was performed to recanalize the totally occluded right subclavian artery. After successful wire externalization, a SMART 8.0 × 40 mm was implanted across the occlusion.
Subsequently, a VBX 8.0 x 59 mm covered stent graft was deployed across the brachiocephalic aneurysm to achieve complete exclusion.
Final IVUS and angiography confirmed full recanalization of the subclavian artery and complete sealing of the aneurysm.



【Clinical time course and implication (or perspective)】
The patient's postoperative course was uneventful.
Follow-up CTA at 1 week showed patent stent flow and no endoleak; blood cultures were negative, and inflammatory markers normalized.
At 1-month CT, the aneurysm showed slight shrinkage with no signs of infection.

MP-023 Successful bailout of the filter wire “KANTON phenomenon” after JETSTREAM atherectomy for a calcified CTO in the SFA

○Yasunari Sakamoto, Keisuke Hirano, Yuki Suzuka, Hiroyuki Omori, Akinobu Takemura, Emi Tsuzaki, Ojiro Miyamoto, Takahiko Suzuki

Division of Cardiology, Toyohashi Heart Center

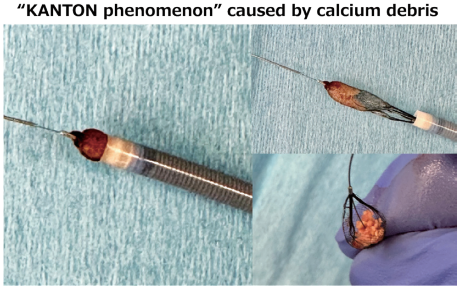
【Case overview】

A man in his seventies with Rutherford category 3 claudication on hemodialysis presented with a PACSS 4 calcified CTO in the distal left SFA.

【Procedure summary】

The lesion was crossed with an intra-calcium wiring strategy using CROSSLEAD Penetration. Plaque modification with the WINNER technique and the CUTE technique enabled IVUS passage, confirming intra-calcium wiring. After exchange to a Parachute filter wire, JETSTREAM XC 2.4/3.4 mm was performed. Excessive calcified debris caused filter wire entrapment. A 0.035-inch Sergeant microcatheter was advanced to cover the filter wire, and a second wire was passed beside it. Balloon dilatation from the second wire was attempted but insufficient. To prepare a second filter if debris spilled during retrieval, a 4 Fr TEMPO was reintroduced. Interference between the two catheters unexpectedly created a coupling effect, releasing the filter wire. However, the filter wire was stuck again at the tip of the 7 Fr Parent Cross guiding seath and was removed together. A 0.035-inch wire was left to preserve access and allow sheath re-insertion. No debris drop or slow-flow occurred, and final dilatation was safely performed with a DCB.

“KANTON phenomenon” caused by calcium debris



【Clinical time course and implication (or perspective)】

This case highlights the “KANTON phenomenon” after atherectomy and the importance of bailout strategies to avoid procedural failure.

MP-024 Successful Limb Salvage by Percutaneous Deep Venous Arterialization for Superficial Femoral Artery Occlusion after Below-Knee Amputation due to Acute Limb Ischemia

○Hikaru Tanemura, Kazuki Tobita, Kazuki Kumagai, Shun Sawada, Eiji Koyama, Motoaki Kai, Hirokazu Miyashita, Shigeru Saito

Department of Cardiology, Shonan Kamakura General Hospital

【Case overview】

A 67-year-old Vietnamese man with a history of stroke presented with acute right lower limb ischemia. He was diagnosed with external iliac artery occlusion at another hospital 2 days later from acute onset, but only prostaglandin infusion was administered. He referred to our hospital on day 5 due to worsening lower limb discoloration. Although we performed endovascular therapy (EVT), effective reperfusion could not be achieved. Limb necrosis was so severe, and below knee amputation was performed on hospital day 21. However, wound healing was poor.

【Procedure summary】

Angiography revealed re-occlusion of the superficial femoral artery with poor collateral only. Thrombectomy by percutaneous Fogarty removed large thrombi, but no distal flow was restored. Next, using a double snare-piercing technique, arteriovenous communication was created at the popliteal level, and an interwoven bare-nitinol stent (SUPERA™) was deployed to establish percutaneous deep venous arterialization (pDVA). Subsequent duplex ultrasound confirmed sustained perfusion, and wound healing gradually improved. The patient was discharged to rehabilitation on day 132 without requiring additional amputation.

【Clinical time course and implication (or perspective)】

pDVA may represent a viable limb salvage option in chronic limb-threatening ischemia patients with femoro-popliteal lesions after BK amputation. We will reveal the details of the case in this report.

MP-025 Intravascular Ultrasound–Guided Reentry via an Occluded Tibial Artery Enabling a Trans-Ankle Retrograde Approach for Long Femoropopliteal Occlusion

○Yuji Ohno

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【Case overview】
Trans-ankle intervention (TAI) is a practical retrograde access route when conventional distal puncture sites are not feasible. Long superficial femoral artery (SFA) occlusions extending into the popliteal artery are suitable targets for TAI. When one of the tibial arteries is occluded, retrograde access through the occluded vessel may be preferred to preserve the remaining patent tibial artery, and intravascular ultrasound (IVUS)–guided reentry can facilitate this approach.
A 70-year-old man presented with lifestyle-limiting claudication. Computed tomography angiography revealed a long SFA chronic total occlusion (CTO) extending to the distal popliteal artery and an occluded posterior tibial artery (PTA).

【Procedure summary】
The distal PTA was punctured under duplex ultrasound guidance, but the guidewire entered the subintimal space. IVUS-guided reentry was then performed at the proximal PTA using the tip-detection method, successfully establishing a retrograde approach. Subsequent bidirectional recanalization with drug-coated balloon angioplasty for the superficial femoral artery and additional balloon angioplasty for the PTA achieved complete revascularization without access-site complications, preserving antegrade flow in both the posterior and anterior tibial arteries.

【Clinical time course and implication (or perspective)】
After the procedure, his symptoms markedly improved.
IVUS-guided reentry through an occluded tibial artery can enable a trans-ankle retrograde approach and facilitate successful revascularization in complex femoropopliteal occlusions.

MP-026 Effect of Sciatic Nerve Block on the Quality of Digital Subtraction Angiography During Endovascular Therapy

○Natsumi Yanaka, Atsuya Murai, Tomoya Fukagawa, Kohei Yamaguchi, Masahiro Miyata, Masakazu Tsutsumi, Shinsuke Mori, Norihiro Kobayashi, Yoshiaki Ito

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【What's known?】
Digital subtraction angiography (DSA) is an essential imaging technique for evaluating vascular anatomy during endovascular therapy (EVT). However, patient movement significantly reduce DSA quality.

【What's new?】
Recently, sciatic nerve block (SNB) has been used in our institution prior to EVT to reduce procedural pain. We hypothesized that SNB may also improve DSA image quality by minimizing patient motion. This study aimed to evaluate the effect of SNB on the quality of DSA during EVT.

Methods
From February 2023 to April 2025, 340 below-the-knee (BTK) lesions were treated at our hospital. 105 cases were treated with SNB prior to EVT, while 231 cases were performed without SNB. The primary outcome was the rate of evaluable DSA acquisition, defined as DSA images in which the outline of the main vessels of interest could be clearly traced to the distal segments. DSA images were assessed by two examiners to enhance objectivity.

Results
The rate of evaluable DSA acquisition was significantly higher in the SNB group compared to the non-SNB group (89 ± 13% vs. 79 ± 21%$p < .001$).

Conclusion
The use of sciatic nerve block may improve the quality of DSA imaging during EVT for BTK lesions.

MP-027 A case of successful revascularization of a severely calcified lesion using Jetstream and Fracking based on calcification distribution

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Department of Cardiology, Sapporo Cardio Vascular Clinic

【Case overview】
An 84-year-old man presented with left intermittent claudication caused by severe calcified stenosis extending from the left common femoral artery (CFA) to the middle part of the superficial femoral artery (SFA).

【Procedure summary】
Endovascular treatment was attemoted considering the patient's frailty. A 6-Fr guiding sheath was inserted through the right CFA. First, Fracking was performed in the left CFA to achieve adequate lumen expansion and advance the guiding sheath to the left distal CFA. Then, Jetstream was applied from the proximal to the middle segment of the left SFA.However, balloon dilation after debulking of the calcification did not achieve sufficient lumen gain, and additional treatment was required. Accordingly, Fracking was performed for deep calcification in the left SFA and resulted in excellent lumen expansion. Finally, DCB dilation was carried out and the final angiogram demonstrated good distal flow.

【Clinical time course and implication (or perspective)】
After the treatment, the ABI improved to 0.99 and symptoms improved. The Jetstream and Fracking were applied to superficial and deep calcifications, respectively, achieving favorable results through a lesion-specific approach.For severely calcified femoropopliteal lesions, appropriate devices and techniques based on calcification distribution may be crucial for optimal outcomes.

MP-028 Insights into flow impairment associated with Jetstream atherectomy for calcified femoropopliteal disease: A JOKER registry subanalysis

○Masanaga Tsujimoto[1)], Hirokazu Miyashita[2)], Shinya Ichihara[3)], Kohei Yamaguchi[4)], Takuya Haraguchi[1)], Kazuki Tobita[2)], Naoki Hayakawa[3)], Shinsuke Mori[4)]

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【What's known?】
Endovascular treatment for calcified lower limb arteries remains challenging. The Jetstream atherectomy device has shown effectiveness for calcified femoropopliteal lesions; however, flow impairment due to distal embolization remains a concern. This study aims to identify factors associated with Jetstream-related flow impairment.

【What's new?】
A retrospective multicenter study analyzed 241 patients (308 lesions) treated with Jetstream between November 2022 and December 2024. The mean lesion length and distal reference vessel diameter were 17.6 ± 10.5 cm and 5.2 ± 1.0 mm, respectively. Chronic total occlusion was observed in 19.5% of lesions, with PACSS grade 4 calcification in 63.3%. Single-cutter and expandable-cutter catheters were used in 37.0% and 77.2% (blades-up 99.5%) of cases. Embolic protection was applied in 49.7% (filter 17.9%, popliteal external compression 35.7%).
Jetstream-related flow impairment occurred in 17.2%. Diabetes mellitus ($p = 0.047$; HR 2.44 [1.01–5.90]) was an independent risk factor, while popliteal external compression ($p = 0.04$; HR 0.38 [0.15–0.95]) significantly reduced the risk.Flow was restored in 91% of cases with adjunctive treatment; five showed no improvement. No major amputations or acute occlusions occurred.
Jetstream carries a measurable risk of flow impairment, particularly in diabetic patients, while popliteal external compression appears effective for prevention.

MP-029 THE "ONSEN" TECHNIQUE: A NOVEL APPROACH TO IMPROVE VESSEL COMPLIANCE IN ACUTE LIMB ISCHEMIA WITH WARM SALINE

○Leenawat Jamjumrat[1)], Saritphat Orrapin[3)], Borirak Chareonsil[1)], Boonying Siribumrungwong[3)], Masanaga Tsujimoto[2)], Terdpoom Benyakorn[3)], Chulaluck Dodnhu[1)], Chamaiporn Bumrung[1)], Takuya Haraguchi[2)]

[1)] Vascular Unit, Department of Surgery, Sawanpracharak Hospital,
[2)] Sapporo Cardiovascular Center; Sapporo, Japan,
[3)] Thammasat University Hospital, Pathumtani, Thailand

【What's known?】
Contemporary series have demonstrated that endovascular revascularization is both safe and effective, with success rates in acute limb ischemia (ALI). However, revascularization of small vessels such as below-the-ankle (BTA) and below-the-elbow lesions remains challenging due to poor run-off, high thrombus burden, and microcirculatory failure. We propose a novel technique which intra-arterial flushing with warm saline improved vessel compliance, termed the "Onsen Technique" (OT) as warm water immersion induces vasodilation.

【What's new?】
We describe four cases improved vessel compliance and enhanced microvascular perfusion in thrombotic occlusions after intra-arterial flushing with warm saline. We propose a novel technique, termed the "Onsen Technique" (OT). In this technique, saline warmed to approximately 40 ℃ is flushed distally before and after angioplasty until visible skin color changes are achieved, thereby enhancing acute luminal gain at the capillary level. The angiography after OT demonstrated improved tibial and digital artery visualization. Clinically, the partial foot skin turned red, warm and toe cyanosis decreased.

MP-030 Endovascular Treatment for a ruptured lumbar artery aneurysm with fibroadipose vascular anomaly in a small abdominal aorta

○Leenawat Jamjumrat[1)], Veera Suwanruangsri[3)], Borirak Chareonsil[1)], Boonying Siribumrungwong[2)], Terdpoom Benyakorn[2)], Chamaiporn Bumrung[1)], Chulaluck Dodnhu[1)], Saritphat Orrapin[2)]

[1)] Vascular Unit, Department of Surgery, Sawanpracharak Hospital,
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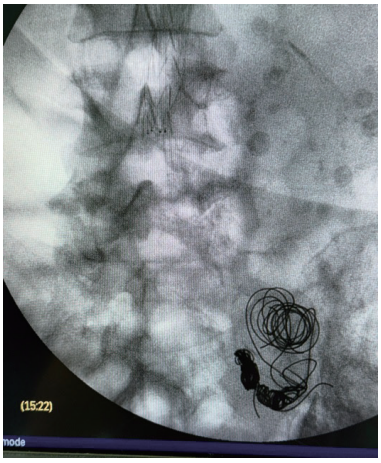
[3)] Maharat Nakhon Ratchasima Hospital, Thailand

【Case overview】
50s female presenting with chronic lower back pain 10 years and a palpable lumbar mass who developed sudden severe pain at the site of the mass. Diagnosed rupture of a saccular lumbar artery aneurysm, with an additional inferior gluteal artery aneurysm supplying the tumor from CTA.

【Procedure summary】
The infrarenal aorta measured 12 mm in diameter. Due to the emergency situation and limited device availability, a 15 mm × 80 mm iliac limb stent was deployed to cover the origin of the lumbar artery. A few weeks later, coil embolization was performed to occlude the inferior gluteal artery aneurysm.



【Clinical time course and implication (or perspective)】
Ultrasound-guided biopsy revealed benign fibroadipose tissue consistent with fibroadipose vascular anomaly. Post-stent deployment angiography demonstrated complete exclusion of the lumbar artery aneurysm without endoleak or contrast extravasation. Follow-up imaging confirmed thrombosis of the aneurysm sac. Subsequent coil embolization resulted in complete thrombosis of the gluteal aneurysm and cessation of tumor perfusion.

MP-031 Staged treatment of bilateral venous malformations of the pyriform sinuses: case report

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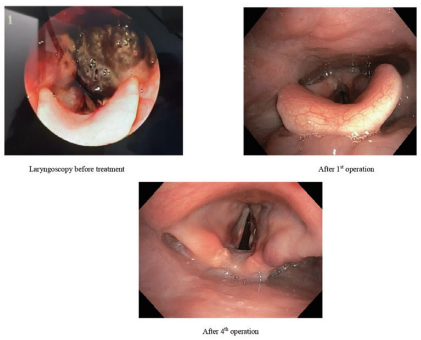
[1] Department of Cardiovascular, Asfendiyarov Kazakh National Medical University,
[2] Department of Vascular Surgery, Erensau Hospital

【Case overview】

A 27-year-old woman was admitted with complaints of shortness of breath persisting for the last two years. Videolaryngoscopy revealed a hemangioma of the larynx and second-degree laryngeal stenosis. Contrast-enhanced computed tomography showed a pathological neoplasm of the laryngopharynx at the level of the hyoid bone with significant stenosis of the laryngeal lumen. The lesion extended to the right peripharyngeal space and caudally to the visceral and carotid spaces of the neck, reaching the upper mediastinum.

【Procedure summary】

A multidisciplinary concilium consisting of a vascular surgeon, thoracic surgeon, otorhinolaryngologist, and endoscopist concluded that, given the progressive nature of the disease, surgical intervention was indicated. The planned treatment consisted of puncture scleroembolization of the malformation in the sternal sinus. Considering the high postoperative risks of bleeding and respiratory compromise, a tracheostomy was first performed, followed by puncture scleroembolization as the initial stage. Four stages of puncture scleroembolization of the venous malformation of the great-glass sinus were subsequently completed.



【Clinical time course and implication (or perspective)】

Eight months after the first operation, video-assisted thoracobronchoscopy demonstrated regression of the malformation. The patient was later examined by a thoracic surgeon, and reconstructive-plastic tracheal reconstruction with excision of granulation stenosis was performed. The postoperative period was uneventful, and the patient was discharged without complications.

MP-032 Popliteal artery entrapment syndrome status post Jetstream atherectomy for in-stent restenosis and total occlusion

○Kuan Chieh Tu

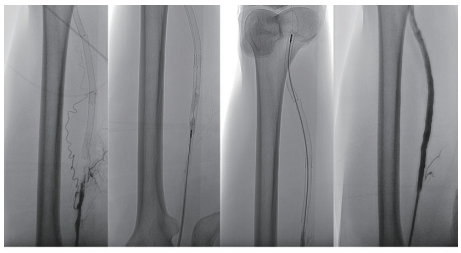
Department of Cardiovascular Medicine, Chi-Mei Medical Center

【Case overview】

A 64-year-old man with dyslipidemia, hypertension, and recurrent popliteal artery entrapment syndrome had undergone retraction of gastrocnemius muscle and adductor magnus release and multiple percutaneous transluminal angioplasty(PTA) with stents from the superficial femoral artery(SFA) ostium to the popliteal artery. He presented with new claudication and resting left calf pain. Examination showed decreased lower-limb pulses and Ankle brachial index of left lower limb is 0.62. CT angiography revealed total occlusion of the left popliteal, anterior tibial, peroneal, and dorsalis pedis arteries. With peripheral artery disease, Rutherford class 4, he underwent successful PTA, resulting in markedly improved arterial flow and significant symptom relief. Post procedure ABI of left lower limb is 1.32.

【Procedure summary】

CTO crossing was achieved using a V18 wire with CXI support. An Abbott Emboshield NAV6 distal protection device was placed, followed by JETSTREAM atherectomy from the SFA to the popliteal artery for in-stent restenosis. Balloon angioplasty was performed from the SFA to the posterior tibial artery. Drug-coated balloons (2.5 × 150 mm for the left PTA and two 6.0 × 200 mm for the SFA–popliteal segment) were applied. The final angiogram demonstrated restored antegrade flow.



【Clinical time course and implication (or perspective)】

The patient's symptoms improved markedly after the procedure.

MP-033 Kissing Stent Technique for Chronic Bilateral Innominate Vein Occlusion in Superior Vena Cava Syndrome: A Complex Venous Reconstruction

○Yu Min Lin, Chon-Seng Hong

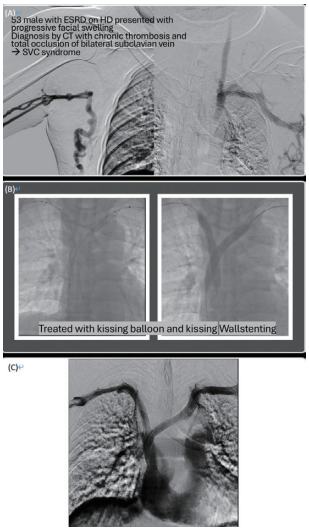
Division of Cardiology, Department of Internal Medicine, Chi Mei Medical Center, Tainan, Taiwan

【Case overview】

A 53-year-old man with diabetes, end-stage renal disease on regular hemodialysis, and chronic obstructive pulmonary disease presented with progressive facial edema for one year. Computed tomography revealed chronic thrombosis of the bilateral innominate veins with multiple collateral formations, leading to superior vena cava (SVC) syndrome.

【Procedure summary】

Bilateral upper extremity venous access was obtained via echo-guided puncture of the basilic veins. Venography confirmed total occlusion of both innominate veins. Using V-18 and Conquest 40 guidewires, successful recanalization was achieved from the SVC to both innominate veins. Sequential balloon angioplasty was performed, followed by deployment of a 16×90 mm Wallstent from the SVC to the left innominate vein and a 14×90 mm Wallstent to the right side. Post-dilatation restored adequate venous flow. The patient's facial edema improved markedly after the procedure.



【Clinical time course and implication (or perspective)】

This case highlights the technical feasibility of complete endovascular reconstruction for chronic bilateral innominate vein occlusion in SVC syndrome, emphasizing the importance of a multi-access approach, sequential high-pressure balloon angioplasty, and the application of a **kissing stent technique** to achieve optimal venous outflow in complex central venous interventions.

MP-034 Background: Impact of lower extremity arterial calcification score on the patency of drug-coated balloon angioplasty for de novo femoropopliteal artery disease

○Kohei Kawamura, Eisuke Saito, Naoaki Matsuo, Atsushi Mori, Yusuke Namba, Tohru Ohe, Yusuke Kawai

Department of Cardiovascular Medicine, Okayama City Hospital

【What's known?】

Peripheral artery calcification is a key determinant of poor outcomes after endovascular treatment (EVT); however, reliable quantitative indicators of calcification severity are limited.

【What's new?】

Purpose: This study evaluated the prognostic value of the lower extremity arterial calcification score (LEACS), calculated from preprocedural lower limb computed tomography (CT), in patients undergoing drug-coated balloon (DCB) angioplasty for femoropopliteal (FP) artery disease.

Methods: Among 144 consecutive patients treated with DCB for de novo FP lesions between April 2018 and June 2023, those who underwent lower limb CT before EVT were analyzed. LEACS was calculated by summing calcification scores from the superficial femoral artery ostium to the popliteal artery. Patients were divided into higher and lower LEACS groups using a cut-off value of 1750. The primary endpoint was 1-year primary patency.

Results: The higher LEACS group had significantly lower 1-year patency (57.2% vs. 85.4%, p = 0.025) and freedom from target vessel revascularization (73.0% vs. 97.1%, p = 0.047). Multivariate analysis identified higher LEACS (OR 2.75, 95% CI 1.19–6.36, p = 0.018) and smaller vessel diameter (<5 mm; OR 2.53, 95% CI 1.74–4.18, p = 0.038) as independent predictors of restenosis.

Conclusion: LEACS from CT effectively predicts outcomes after DCB angioplasty in FP artery disease.

MP-036　CFA高度石灰化病変に対するEVT後に早期再閉塞を来した一例 ～生活習慣要因の関与を考慮して～

○下田　義晃，木田　遼太，田谷　俊彦，田中麻里子，田中　哲也
JCHO神戸中央病院　循環器内科

80歳代男性の左 LEAD 症例。左 CFA 高度石灰化狭窄に対し ARCADIA テクニックで EVT を施行し、8mm POBA で MLA20mm^{2}が得られ、ABI1.04へ改善した。2週後 ABI0.55に低下し CFA 近位部に血栓閉塞を認め、再 EVT を施行した。8mm POBA + Fracking で MLA34.2mm^{2}まで得られ、術後 DOAC を追加とした。早期再閉塞の要因として日常的なスクワット習慣が疑われ、生活指導を併用した。CFA 治療後の管理の重要性を再認識させる症例である。

MP-037　下腿切断後の創閉鎖困難に対し盲端部まで血行再建を行い創治癒し得たCLTIの一例

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JCHO神戸中央病院　循環器内科

70代男性、右CLTIの糖尿病患者。右足部壊疽に対し下腿切断を施行、術前造影で AK 領域に有意狭窄を認めなかった。しかし術後創閉鎖得られず、3か月後の再造影で SFA 遠位～ P2高度狭窄と P3以下盲端閉塞を認めた。SFA ～ P2への EVT では改善乏しく、5か月時に盲端部再開通を追加施行し肉芽形成が進行、最終的に植皮で閉鎖を得た。切断後創閉鎖困難例では急速な病変進行もあり、盲端部血行再建が有効となる場合がある。

MP-038　Budd-Chiari症候群に対してEVTを行った1症例

○藤田　崇史，三根かおり，ジョナルド　オチア　ルセロ，杉原　　充，三浦伸一郎
福岡大学病院　循環器内科

50歳代男性、両下肢の浮腫、腹部膨満、肝機能障害を指摘。Budd-Chiari 症候群と診断し、下大静脈の閉塞に対して EVT を実施。右内頸静脈、右大腿静脈より両方向性アプローチで、閉塞病変の Wire 通過に成功した。緩徐にバルーンサイズアップを行い、最終的にバルーン径16mm で POBA を施行。ステント留置を回避し POBA 単独で、３か月以上の開存と肝機能の改善を得られ、良好な臨床経過を辿った一症例を報告する。

MP-039　腹部大動脈の高度な屈曲と石灰化を有するLeriche症候群に対してEVTを実施した1例

○本道俊一郎，横山　遥貴，竹田　悠亮，津田　豊暢，三輪　健二，古荘　浩司，
安田　敏彦
石川県立中央病院　循環器内科

症例は90歳代女性の CLTI。CT にて腹部大動脈の著明な屈曲および石灰化を認め、動脈終末部から閉塞し両総腸骨動脈および右総大腿動脈の一部も高度石灰化による閉塞を認めた。大動脈の屈曲が顕著であったが、TRI と TFI による両方向性アプローチにて wiring に成功し、最終的には VBX による kissing stent で仕上げた。ロープロファイル化した VBX のアプローチ部位による kissing stent に関する考察を加えて報告する。

MP-040　ECPELLA管理を要した劇症型心筋炎のデバイス抜去時に血管損傷をきたしベイルアウトした1例

○本道俊一郎，横山　遥貴，竹田　悠亮，津田　豊暢，三輪　健二，古荘　浩司，
安田　敏彦

石川県立中央病院　循環器内科

20代男性。劇症型心筋炎で ECPELLA 管理後に心機能が回復したため Perclose を使用し抜去した。抜去直後より大腿動脈が触知不能となり後壁縫合したと考えた。外科的に確認したところ後壁縫合ではなく、大口径シースを抜去した際に内膜が引きつられ invagination 様になっていることが判明した。カットダウンによりシース挿入し、また TRI による手技を併用しながらベイルアウトに成功したので報告する。

MP-041　ViabahnとSuperaにより治療できた膝下動脈瘤によるCLTIの一例

○三輪　宏美，早川　直樹，鶴巻　利宜，土田　泰之，市原　慎也，櫛田　俊一

国保旭中央病院　循環器内科

55歳女性が右膝窩動脈瘤でフォローされていたが足趾潰瘍をきたした。外科的治療は不適で血管内治療が選択された。浅大腿動脈から膝下領域(BTK)の閉塞に対して2本の Viabahn で治療するも急性肢虚血を繰り返し発症した。Indigo での血栓吸引、エッジに対するステント留置、Supera による血管の屈曲の矯正及び BTK の IVUS-guided wiring による血流の完全回復により以後6ヶ月の開存が得られている。

MP-042　浅大腿動脈から膝窩動脈の閉塞を4度繰り返したCLTIの一例

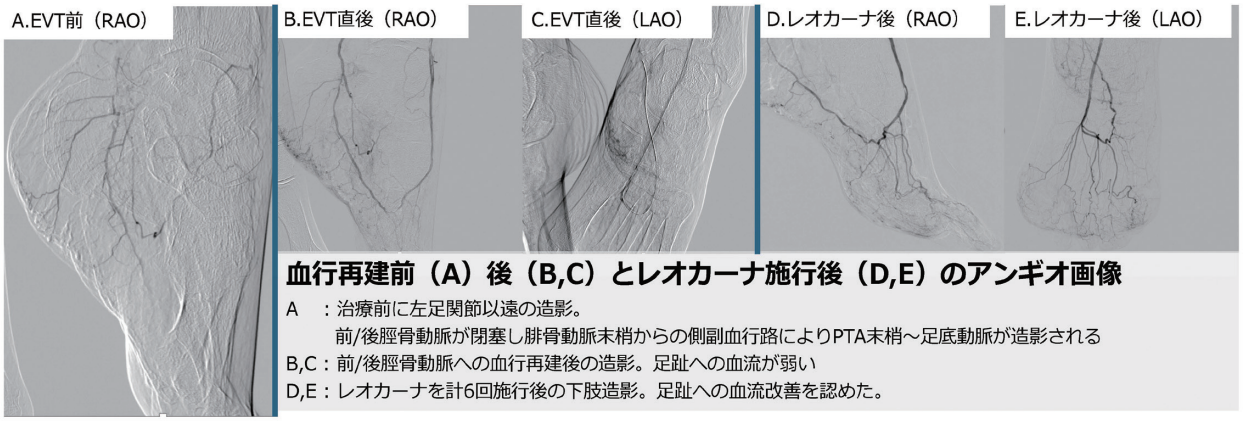
○藤村　祐斗，梶山　渉太，與田　俊介，吉田　俊伸，川元　隆弘，廣畑　　敦
心臓病センター榊原病院　循環器内科

症例は82歳女性、維持透析患者。4年前にCLTI、左浅大腿動脈から膝窩動脈の狭窄病変に対してDCBで治療を行った。その後3年間で3度の閉塞を繰り返し、2度はDCB、3度目はIWSを留置して治療を行った。しかし、さらに6ヶ月後に安静時疼痛が再燃し、4度目の閉塞に対して血栓吸引とステント内をHigh-dose DCBで治療を行った。4度の閉塞を繰り返し、抗血栓薬やfinalize deviceを含めた治療方針の決定に苦慮した症例であり、報告する。

MP-043　シェーグレン症候群に合併したCLTIに対してEVTとレオカーナを用いて治療した1例

○磯田　　徹，山岡　広季，井合　　渉，栗原　和人，丹羽　直哉，佐藤　篤志，田中　宏明，
鶴見　昌史，小野　智彦，松村　圭祐
独立行政法人国立病院機構　埼玉病院　循環器内科

シェーグレン症候群を有する69歳女性。主訴はABI正常の左下肢チアノーゼ。2ヶ月後には左足趾に黒色壊疽と潰瘍が出現し、下肢造影を施行した。閉塞していた左前脛骨動脈/左後脛骨動脈に対してバルーン拡張し、順行性血流を得るも足趾への血流は乏しく、EVT後のSPPは左足背/足底 10/25mmgであった。レオカーナを6回施行後の下肢造影では足趾への血流増加を認め、SPP左足背/足底 21/30mmHgと改善し、創部の増悪進展を抑制できた一例。



血行再建前（A）後（B,C）とレオカーナ施行後（D,E）のアンギオ画像

A　：治療前に左足関節以遠の造影。
　　前/後脛骨動脈が閉塞し腓骨動脈末梢からの側副血行路によりPTA末梢～足底動脈が造影される
B,C：前/後脛骨動脈への血行再建後の造影。足趾への血流が弱い
D,E：レオカーナを計6回施行後の下肢造影。足趾への血流改善を認めた。

MP-044　孤発性浅大腿動脈瘤にカバードステント留置後、超慢性期にステント破損をきたしViabahn追加留置を要した1例

○石垣　成紘，高木　友誠，山内　靖隆，宮本　　明
総合高津中央病院　循環器内科

78歳男性、孤発性の巨大右浅大腿動脈瘤の症例。外科的切除術も考慮されたが、患者と相談しEVTによるステントグラフトPASSAGER10.0X100mmを留置した。13年後にPASSAGERのfractureを認めた。2022年、瘤の再発を認め、2025年にPASSAGERの完全断裂に到り、疼痛を認めたことからEVTにてViabahn8.0X150mm留置行い、瘤のresectionに再度成功した。孤発性浅大腿動脈瘤は珍しい疾患で、EVTの選択が正しかったのか、長期経過を考察したい。

MP-045　感染性心内膜炎術中に発症した急性下肢動脈閉塞に対し経カテーテル治療を施行した1例

○中田　悠貴，柴橋　英次，芹川　直輝，川本　尚宣，吉川　将史，大槻　尚男，小暮　智仁，
山口　淳一
東京女子医科大学病院　循環器内科

70代男性、脳梗塞を伴う大動脈弁位感染性心内膜炎に対し準緊急手術を施行した。術中経食道心臓超音波では疣贅を確認できたが、開胸後に疣贅が消失し、塞栓症精査で施行した術後CTで浅大腿動脈遠位の閉塞を認めた。急性下肢動脈閉塞と診断し、カテーテル治療を行い、生検鉗子を併用して再開通を得た。感染性心内膜炎術中に発症した急性下肢動脈閉塞に対し、生検鉗子を用いた経カテーテル治療を行った稀な1例を報告する。

MP-046　非透析重症上肢虚血に対してシングルニードル法を用いてレオカーナ治療を行った1例

○山内　靖隆

総合高津中央病院　循環器内科

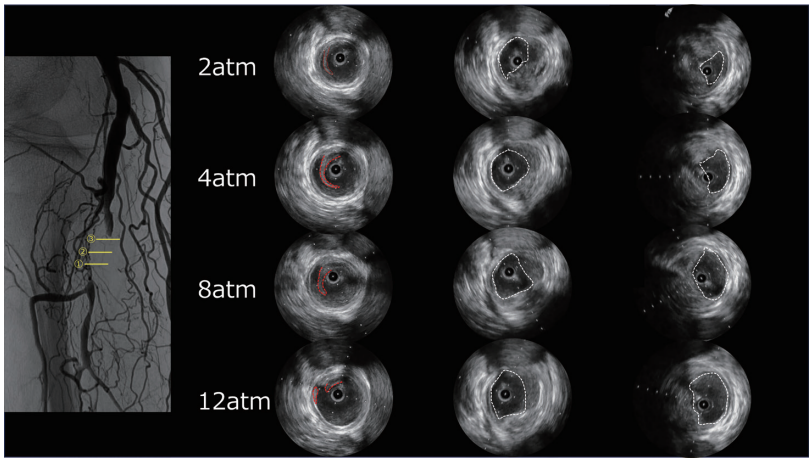
56歳男性、右第2指壊疽、重症上肢虚血患者。上肢アンギオ像でも橈骨・尺骨動脈末梢まで有意病変は無く、第２指末梢にて avascular 認めた。高気圧酸素療法・レオカーナ療法実施。非透析患者でブラッドアクセスが無いため、20G サフロー針を右前腕皮静脈に穿刺し、シングルニードルでレオカーナを10回施行。創部は改善し、疼痛も消失し、アンギオ上右第2指末梢の flow の改善を認めた。本法はレオカーナのさらなる適応拡大につながる。

MP-047　プラークにカッティングバルンが有効であることをIVUSで確認できた一例

○荒井　靖典，加藤　雄一，武智龍之介，齊藤　宇亮，岡　　明宏，内藤洋一郎，森本　芳正，吉川　昌樹

福山市民病院　循環器内科

80歳代男性、右下肢の跛行と血色不良あり。CT では RP3が閉塞し、病変はプラークが主体。EVT 施行。IVUS 上は脂質と線維の混合性プラークで、ワイヤーは血管縁に位置。カッティングバルンで2→4→8→12atm と段階的に拡張、拡張毎に IVUS 観察。プラークが段階的に圧縮され、wire 位置が血管中央方向に移動。重篤な解離なく、DCB で治療終了。プラークにカッティングバルンが有効であることを IVUS で観察し得た。

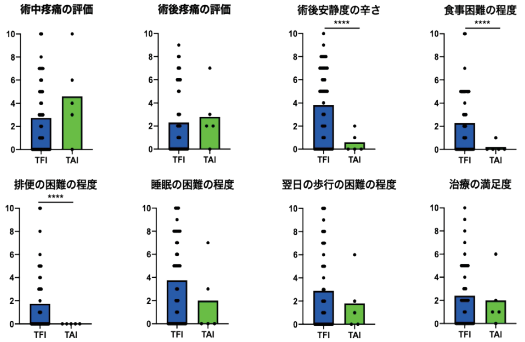


MP-048　下肢閉塞性動脈疾患に対するTrans Ankle Intervention（TAI）がもたらす患者ストレス低減効果と看護業務改善の検討

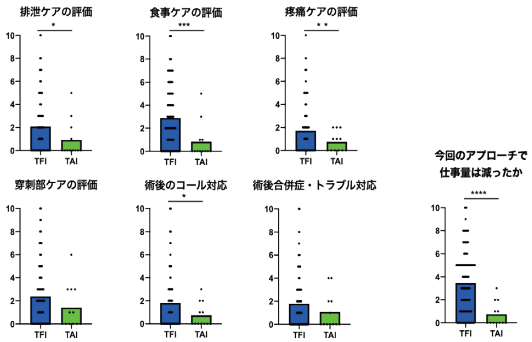
○杉本　　健
京都田辺中央病院　循環器内科

2024/7/1 ～ 2025/4/30 に EVT を受けた患者を対象に、患者8項目・看護師7項目のアンケートを実施。患者では術後安静・食事・排便の負担が、鼠径より TAI で有意に軽減。看護師も排泄・食事・疼痛ケア・術後コール対応・業務負担が有意に低かった。TAI は患者・看護師双方にやさしいアプローチである可能性が示唆された。

患者へのアンケート結果



看護師へのアンケート結果



MP-049　種々の治療を組みあわせて救肢を得た急性下肢虚血の１例

○與田　俊介
心臓病センター榊原病院　循環器内科

82歳の男性。急激な右下肢痛の出現後3日で近医受診、動脈閉塞を疑われ、当院へ紹介となった。急性動脈閉塞の診断のもと、緊急での外科的血栓除去術でを血流改善は得られず、切断も視野に抗血栓療法のみの方針となったが、その後、数日でわずかに色調改善あり。
切断範囲縮小目的に、動脈硬化性病変への intervention、および外科的血栓除去を組み合わせたことにより、末梢灌流改善し、大切断が回避できたため、ここに報告する。

MP-050　高度石灰化閉塞病変にViabahn VBXを留置し短期間で変形した１例

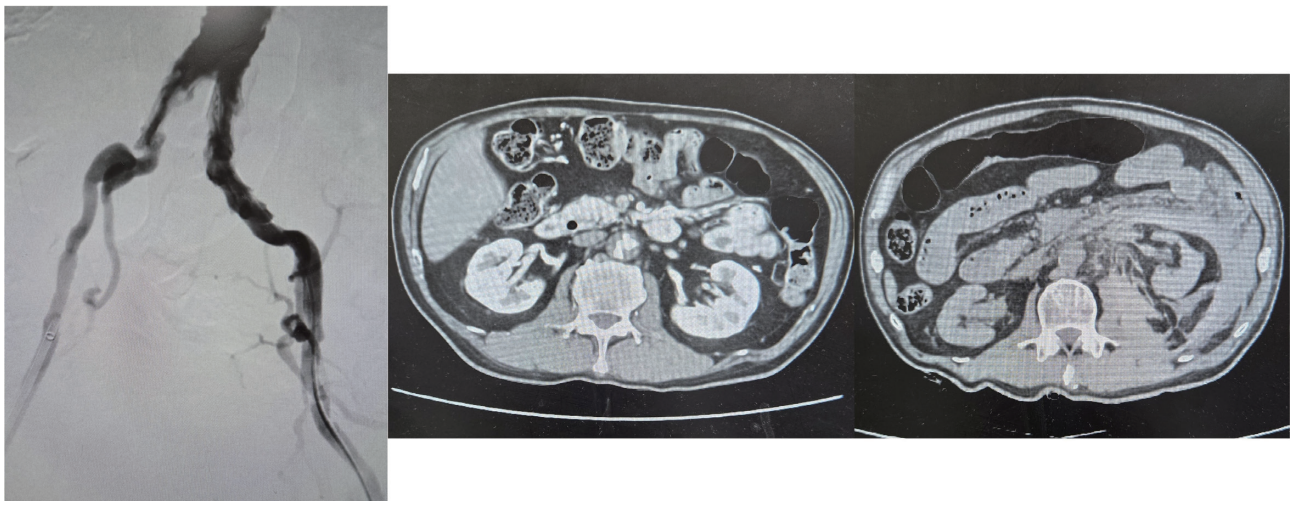
○宮井　伸幸，橋本　　翔，立石　周平，中村　玲雄，澤西　高佳，木下　法之
康生会武田病院　循環器内科

80歳代女性の跛行患者。腸骨動脈長区域閉塞と一部全周性石灰化を認めた。橈骨動脈と鼠径からの両方向性アプローチで通過に成功。石灰化の中を通過していることを確認し CIA に VBX、EIA に Misago を留置。術後4ヶ月目に ABI 低下を認め、画像検査にて VBX の変形を認めた。円背はなく、腹部マッサージを受けたこともなく石灰による recoil を疑い SMART による補強を行った。全周性石灰化に VBX を留置し変形を来した症例を経験したため報告する。

MP-051　右CIA-EIAのEVT fail後、術後4日目に左後腹膜出血を発症し救命困難であった一例

○阿多　智之，平光　一貴，田中　源八，橋冨　　裕，堂前　　洋
東京西徳洲会病院　循環器科

72歳男性、右 CIA-EIA の高度屈曲を伴った狭窄に対して EVT を施行したが同側＋ crossover アプローチではワイヤー通過困難、後日左上腕アプローチを試みたがワイヤーがプラーク内に迷入してしまい治療は断念した。術後4日目に突然卒倒し CPA となった。AI-CT では術直後には見られなかった著明な左後腹膜出血を認めた。術前 CT では shaggy aorta で腎動脈直下に狭窄を認めていた。本症例の急変との関連について考察する。



MP-052　膝窩動脈の高度石灰化を伴うCTO病変に対してAntegrade Dissection Reentry（ADR）を行いPave & Crack法でViabahn ステントグラフトおよびSuperaステントを留置し、血行再建し得た症例

○小松　洋介
東邦大学医療センター大森病院　循環器内科

症例は89歳女性、主訴は右足趾の安静時疼痛、右 ABI は0.55、右浅大腿動脈遠位部から膝窩動脈（P2）にかけての完全閉塞を認め EVT を施行した。順行性および逆行性に wire を進めるも高度石灰化に弾かれてしまい通過させられなかった。そのため順行性に荷重の高い wire 偽腔か血管外から逆行性の wire をメルクマールに管球を左右に振りながら穿刺をし reentry に成功した。Pave & Crack 法でステントを留置し血行再建し得た症例を経験した。

MP-053　血管内治療が奏功した限局性腹部大動脈解離の一例

○衣川　　謙
淀川キリスト教病院　循環器内科

症例は労作性狭心症で3枝治療後フォロー中の81歳男性。突然発症の両下肢間欠性跛行を主訴に受診した。造影 CT 検査で腹部大動脈遠位部に限局性解離を認め、跛行症状の原因と考え同日より入院とした。患者が低侵襲な治療を希望し経皮的血管形成術を施行する方針とした。double-D-molding technique を用いて両鼠径逆行性穿刺で VBX 7.0mm×59mm を留置した。術後、跛行症状は改善し第4病日に自宅退院した。

MP-054　Indigo systemが有効であった急性下肢虚血の2症例

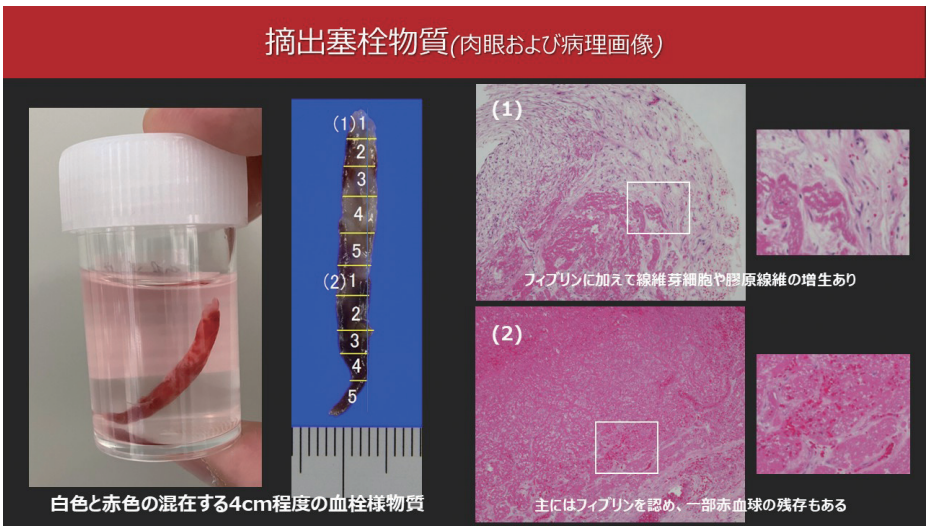
○君島　勇輔，岩田　周耕，三輪　高士，丹　　通直，浦澤　一史
カレス記念病院　循環器内科

近年、Indigo system の登場により急性下肢虚血（ALI）の治療成績は著しく向上している。当院での Indigo system 使用経験を2例報告する。症例1は慢性心房細動を有する80歳代男性で、浅大腿動脈血栓閉塞による ALI。症例2は右浅大腿動脈に Eluvia 留置中の60歳代男性で、ステント内急性閉塞による ALI。いずれも CAT8 による血栓吸引で残存狭窄なく再灌流を得た。塞栓性およびステント内血栓閉塞のいずれにも有効であった。

MP-055　浅大腿動脈（SFA）完全閉塞病変に対するEVTで末梢塞栓を来たし、治療に難渋した１例

○卜部　洋司，田中　亮介，横山　大騎，武市　一輝，森田　雅史，廣延　直也，板倉　希帆，友森　俊介，岡　　俊治，光波　直也，福田　幸弘，上田　浩徳
県立広島病院　循環器内科

左下肢間欠性跛行の60代男性。CTA で左外腸骨動脈高度狭窄と SFA に完全閉塞を認め、EVT を施行した。バルーン拡張後 Ranger™ で薬剤塗布したが、膝窩動脈閉塞を生じ末梢塞栓と判断した。血栓吸引やバルーン拡張で改善乏しく、Fogarty で血栓除去を行い救肢した。摘出塞栓物質は白色と赤色血栓が混在し一部に器質化所見を認めた。本症例について病変部の CT・IVUS 画像、病理所見を含め若干の文献的考察を行い報告する。



MP-056　interwoven nitinol stent（IWS）を介した逆行性アプローチで、PRESTO（Precise Retrograde Supera Stenting of the Ostium）テクニックを用いてSFAの起始部狭窄に対してEVTを施行した一例

○牧　正彬[1)]，尾崎　大[1)]，阿部　寛史[1)]，島井　亮輔[1)]，礒貝　浩之[1)]，戸叶　隆司[1)]，南野　徹[2)]

[1)]順天堂大学医学部附属浦安病院　循環器内科，[2)]順天堂大学大学院医学研究科循環器内科学教室

包括的高度慢性下肢虚血（Rutherford 分類5）の60代男性。右 SFA 入口部に石灰化を伴う高度狭窄を認めたが、病変と穿刺部との距離の問題から順行性アプローチが困難であったことから、以前に膝窩動脈に留置された IWS を穿刺し逆行性にシースを挿入。PRESTO テクニックを用いて SFA 入口部に IWS を留置した。留置された IWS を介したアプローチでも、PRESTO テクニックは安全かつ有効な選択肢となり得ることを報告する。

MP-057　ELUVIA留置後慢性期に感染性動脈瘤を発症した一例

○南　喜人，深井　邦剛，五月女　彩，田渕　友理，植村　雄大，高木　佑亮，鬼界　雅一，濵岡　哲郎，中上　拓男，白山　武司

近江八幡市立総合医療センター　循環器内科

症例は82歳男性。Rutherford 分類Ⅱの跛行症状を有しており、CFA に高度石灰化を伴う狭窄病変と SFA に CTO 病変を認めた。CFA に対して内膜摘除施行後、SFA に対しては ELUVIA 留置。ELUVIA 留置18ヶ月後に MSSA 菌血症を発症、ELUVIA 感染を疑い抗生剤治療を開始。血液培養陰性化したため抗生剤永続投与の方針としたが、1ヶ月後には ELUVIA 留置部の動脈瘤が急速に拡大。ELUVIA 留置後慢性期に感染性動脈瘤を発症した症例を経験したため報告する。

MP-059　“Cross Smart, Cross Safe” ― CLTIにおける新型Crosser iQを用いたDART-iQ BTK Techniqueの有用性

○岩崎　義弘，岡田　正治，八木　崇文，小池　淳平，岸森　健文，谷　　陽良
淡海医療センター　循環器内科

重症下肢虚血患者にいて石灰化を伴う below-the-knee 慢性完全閉塞は治療に難渋することがある。今回2024年9月より使用可能となった新型 Crosser iQ を用い、60症例を後ろ向きに解析した。Technical success は92%と良好で、PACSS や病変長で差を認めず、重大合併症は認めず従来より手技時間の短縮が示唆された。Crosser iQ を用いた DART-iQ BTK Technique は、安全かつ効率的な BTK CTO 治療戦略として有望である可能性が示唆された。

MP-060　心房細動に合併した急性腎梗塞に対し血管内治療が奏功した１例

○鈴村　祐矢，山田　雄大，安藤　　圭，長瀬　　大，芝原　太郎，小野　大樹，鈴木　圭太，
中島　　孝，山浦　　誠，井戸　貴久，髙橋　茂清，青山　琢磨
中部国際医療センター　循環器内科

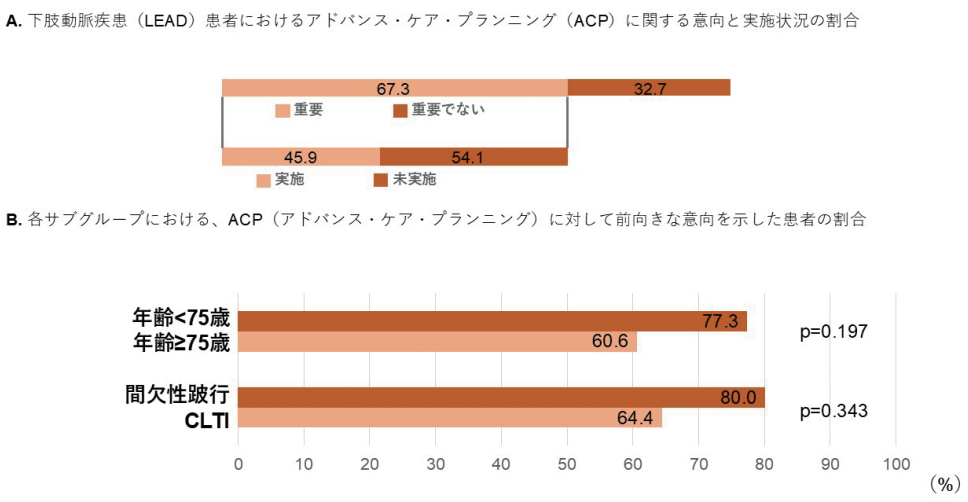
症例：76歳男性。突然発症した左側腹部痛のため当院を受診。心電図では初発の心房細動、造影 CT では両腎梗塞、脾梗塞を認めた。左腎動脈は本幹からの閉塞であった。発症早期の持続性症状であり、EVT による血行再建を施行した。左腎動脈から多量の血栓を吸引し、良好な血流を得ることに成功した。術後腹痛は消失し、腎機能増悪も認めなかった。急性腎梗塞に対して EVT を施行し良好な転機を得られた1例を経験したため報告する。

MP-061　下肢動脈疾患患者におけるアドバンス・ケア・プランニング（ACP）に対する意向の検証

○舟橋紗耶華，河野　隆志，合田あゆみ，副島　京子
杏林大学医学部　循環器内科

下肢動脈疾患（LEAD）患者55例を対象に ACP に関する意向を調査した。67.3％が ACP を重要と認識し、45.9％が実際に経験していた。ACP を希望する時期は「必要と感じたとき」「下肢切断が必要となったとき」「予後不良の疾患と診断されたとき」「生命の危険を感じたとき」が８割以上であり、64.9％が外来での定期的な対話を望んだ。ACP への前向きな姿勢は年齢や疾患重症度に依存せず、LEAD 患者における ACP の重要性が示唆された。

図.



MP-062　Crosser iQを用いた重度石灰化SFA CTOの血行再建後に、IVUS-guided intraluminal wiringを施行したCLTIの1例

○井上　雅巨，早川　直樹，鶴巻　利宜，土田　泰之，市原　慎也，櫛田　俊一
総合病院国保旭中央病院　循環器内科

症例は78歳男性。右下肢の包括的高度慢性下肢虚血(CLTI)にて受診した。下肢造影CTで高度石灰化を伴う右浅大腿動脈(SFA)の閉塞および膝下動脈(BTK)の閉塞と高度狭窄を認めた。初回治療ではCrosser iQを用いてSFAの血行再建を行い、2期的にIVUS-guided intraluminal wiringによりBTKの血行再建を施行した。高度石灰化を伴う複雑病変に対し、デバイス選択とアプローチを工夫し良好な結果を得た症例を経験したため報告する。

MP-063　全身麻酔下に腸骨、大腿膝窩、膝下動脈領域の病変に対して一期的EVTを行った高齢男性の包括的高度慢性下肢虚血の一例

○吉田　善紀
東大和病院　循環器科

症例は、80歳代男性、両側足趾壊死のため紹介となった。両側の腸骨、大腿膝窩、膝下領域に病変を認めた。初回の治療中に安静保持困難となり、治療中止となった。病状説明を重ねた上で全身麻酔下での血行再建に了承され、再血管内治療を実施した。全身麻酔下に右橈骨動脈、右大腿動脈よりアプローチを行い、血行再建に成功した。血行再建後は創傷治癒し自宅退院となった。上記症例につき報告する。

MP-064　人工骨頭上のEVUSガイド穿刺で予想外に高位穿刺になったCLTIの一例

○荒木　浩
横須賀市立総合医療センター　循環器内科

右人工股関節置換術後の７０代女性 CLTI(R5)。右 CFA を EVUS ガイドにプラークをよけて穿刺したはず。対側クロスオーバーにて左 SFA CTO+CFA 狭窄を DCB+POBA で治療。右側穿刺部をエクソシールで止血するも実は解剖学的 EIA で圧迫では止血困難。上肢システムからバルーンタンポでほぼ止血したが、遅発性出血を懸念し対側クロスオーバーでVBX 7x39mm 留置。人工骨頭を後方に見での EVUS ガイド穿刺で思いのほか高位穿刺となった。

MP-065　石灰化結節に対するJETSTREAMの有用性に関する検討

○杉本　英純
名古屋ハートセンター　循環器内科

本研究では、石灰化結節病変に対し ARCADIA テクニック後に JETSTREAM を使用した効果を検討した。2021年12月～2025年3月に治療を受けた症例を後ろ向きに解析し、JETSTREAM 使用群と非使用群で PSM を実施した。各群8例で比較した結果、周術期合併症に差はなかったが、CDTLR は JETSTREAM 群で有意に低率であった(5.9% vs 29.2%, p=0.04)。JETSTREAM の併用は CDTLR を減少させる可能性が示唆された。

MP-066　薬剤溶出性ステント Eluvia留置後急性期に血管損傷をきたし，カバードステント Viabahn留置にてベイルアウトした1例

○北山詩奈子，習田　龍，鳥居　南見，迫　恒志，大菅　瑞生，阿部　誠，義間　昌平，正木　豪，牧野　信彦，増田　大作，永井　義幸，山下　静也

地方独立行政法人 りんくう総合医療センター　循環器内科

症例は83歳女性。 右浅大腿動脈慢性完全閉塞病変に対して血管内治療を行った。 ワイヤーは一部血管の縁を通過していたが、clinical true lumen であり Eluvia を入口部から2本留置した。 直後の造影は問題なかったが術終了後に右大腿部腫脹あり、再度造影を行なったところステント中間部より extravasation を認めたため、Viabahn を留置し止血を得た。今回 Eluvia 留置後急性期に血管損傷をきたした1例を経験したので考察を交えて報告する。

MP-067　VIABAHN VBX留置直後より血栓閉塞を認め難渋した症例

○下永　貴司

独立行政法人国立病院機構 呉医療センター　循環器内科

症例は56歳男性。造影 CT にて右 EIA の閉塞を認めた。左 CFA と右 CFA から両方向性アプローチでワイヤー通過に成功し VIABAHN VBX を2本留置した(7.0/39mm+6.0/79mm)。直後より VBX 近位部に血栓を認め右 IIA は閉塞していた。血栓吸引、POBA を繰り返したが血流改善に乏しく最終的に右 EIA、右 IIA への KBT を施行し血流改善した。術後は抗凝固療法を継続し経過良好である。VIABAHN VBX 留置後に血栓閉塞となり難渋した1例を経験したため報告する。

MP-068　動静脈瘻を合併した血栓後症候群に対するステント留置術の9年経過観察例

○仲里　淳，安里　哲矢，平良　亘，島袋　祐士，屋宜　宜仁，宮城　唯良，高橋　孝典，和氣　稔

沖縄県立中部病院　循環器内科

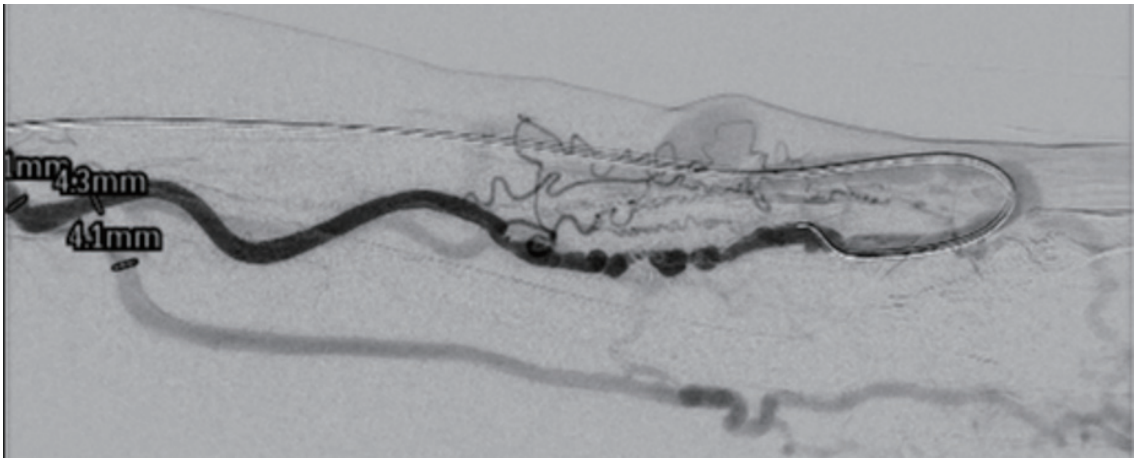
血栓後症候群は深部静脈血栓症後に発症する慢性疾患であり、動静脈瘻を合併すると下腿浮腫が増悪することがある。腸骨静脈閉塞と動静脈瘻を合併した症例に対しては、ステント留置術と動静脈瘻塞栓術の併用が報告されているが、本症例ではステント留置術のみで治療を行った。術後、動静脈瘻の減少と下腿浮腫の明らかな改善を認め、9年間良好な臨床経過が得られたため、貴重な症例と考えられ、文献的考察を加えて報告する。

MP-069　手掌動脈弓からの逆行性血流により維持されていた橈骨動脈狭窄/閉塞症例に対してVAIVTを施行した2症例

○中村　英祐[1)]，櫻間　教文[2)]，永野　宏奈[1)]，櫻井　裕子[1)]，東谷　雅人[1)]，白石　愛子[1)]，國正　靖[1)]，大西　啓右[1)]，森廣　俊昭[2)]，祖父江　理[1)]，南野　哲男[1)]

[1)]香川大学医学部附属病院　腎臓内科，[2)]重井医学研究所附属病院　外科

手掌動脈弓からの逆行性血流により維持されていた橈骨動脈狭窄 / 閉塞を伴うシャント不全の2症例に VAIVT を施行した。症例1では高度狭窄に対し順行性アプローチ、症例2ではサポートカテーテルを用いて再開通に成功した。吻合部中枢橈骨動脈病変では逆行性血流でシャントが維持される事もあるが、血流量低下や盗血症候群時には介入すべきである。デバイス操作 / 選択を工夫する事で再開通の可能性があり、個別戦略の立案が重要である。



MP-070　浅大腿動脈の治療後早期にステント閉塞を来した一例

○浅野　峻見[1)]，佐々木　航[1)]，児野　ゆめ[1)]，佐々木健太[1)]，向井田瑛佑[2)]，川島　和哉[2)]，
森野　禎浩[1)]

[1)]岩手医科大学附属病院　内科学講座循環器内科分野，[2)]岩手医科大学附属病院　放射線医学講座

維持透析中の66歳男性．重症下肢虚血の診断で右 SFA の石灰化を伴う高度狭窄に対して EVT を実施．ARCADIA technique を用いて wiring し，バルーン拡張後に ELUVIA を留置し，MSA は10.6mm2で良好な血流を得て終了した．しかし，その1ヶ月後にステント閉塞に伴う ALI を発症した．石灰化による ELUVIA の拡張不良を残したことが ALI の原因と考えたが，当院では JETSTREAM 等は使用できず，治療方法に苦慮したため，文献的考察を含めて報告する．

MP-071　Jetstreamによる治療後、急性動脈閉塞を繰り返した１例

○民西　俊太，小出　正洋，小田　智水，藤井　翔太，馬渕　貴史，西村　哲朗，大倉　孝史，
辻　　弓佳，佐分利　誠，瀧上　雅雄，井上　啓司，白石　　淳

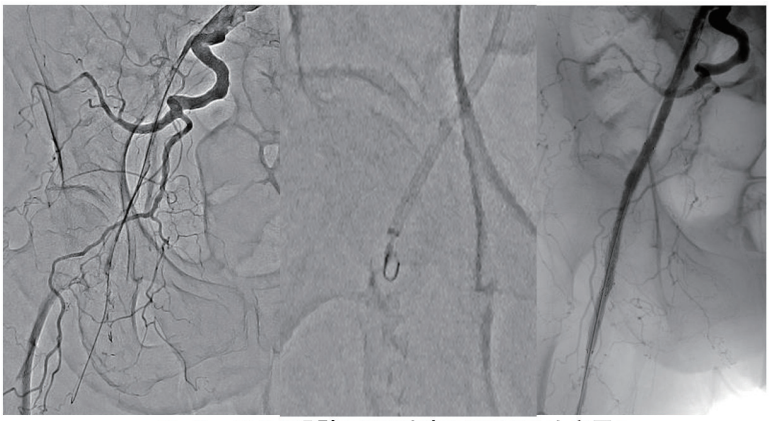
京都第二赤十字病院　循環器内科

症例は70歳男性の透析患者。9ヵ月前に右浅大腿動脈（SFA）遠位部に Jetstream で治療した。今回突然の右下肢の疼痛を認め、造影 CT で右 SFA 遠位部に閉塞を認めた。血栓吸引とバルーン拡張で、再灌流を得た。1ヶ月後に再度同部位の急性動脈閉塞を認め、治療した。石灰化結節が原因と考えられ、後日 Jetstream による切削を行い、その後は再発なく経過した。Jetstream による切削後、急性動脈閉塞を繰り返した1例を経験したので報告する。

MP-072　SFA入口部が過去の内膜摘除術にて遮断された状況でのEIA-CFA-DFA方向の血栓閉塞によるALI患者を救肢できた一例

○田尻　勇太，宮川　弘之
東京品川病院　循環器内科

症例は普段歩行可能な92歳女性。右下肢の冷感、安静時痛を主訴に搬送された。右第4趾には小潰瘍も認め、Acute on chronic の ALI を疑う状況であった。造影 CT 検査にて右 EIA 入口部から CFA-DFA 入口部まで至る長区間閉塞を認めた。Indigo System による吸引を行うも対側山越えアプローチにて Indigo カテーテルの操作性は低下し解離を形成した。DFA 中間部からの逆行性アプローチを追加しステント留置にて bail out したので報告する。



＜Indigoによる吸引＋DFA方向へのステント留置＞

MP-073　巨大子宮筋腫に合併した深部静脈血栓症に対して静脈ステントによる血行再建に成功した一症例

○甲斐　誠章，飛田　一樹，種村　　光，熊谷　和樹，小山　瑛司，宮下　紘和，
齋藤　　滋
湘南鎌倉総合病院　循環器内科

症例は50代女性で、宗教的無輸血希望の患者。巨大子宮筋腫に合併した左総腸骨静脈の DVT を指摘され、当科に入院。IVC フィルター留置後に子宮筋腫に対して外科的手術を施行されたが、輸血なしでは子宮全摘は困難と判断された。インターベンションの方針とし、静脈ステントを留置し、DVT の治癒が得られた。施設限定ではあるが、本邦でも静脈治療デバイスが導入された。当院での静脈インターベンション症例のまとめを含め、報告する。