ORAL PRESENTATIONS

[OP-01]

Successful Treatment of a Large Symptomatic Left Subclavian Artery Aneurysm Using Endovascular Plug Occlusion: A Case Report Highlighting Technical Challenges

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Aim: Subclavian artery aneurysms represent a rare but clinically significant vascular pathology, accounting for less than 1% of peripheral arterial aneurysms. These lesions carry substantial risks including thromboembolism, compression symptoms, and potential rupture, necessitating prompt intervention when symptomatic.

Case Report: A 71-year-old female with a history of hypertension presented with progressive left upper extremity symptoms including pain, numbness, and weakness. Physical examination revealed differential blood pressures between arms (right: 130/70 mmHg, left: 105/65 mmHg) and a weak left radial pulse. Initial chest radiography demonstrated a well-circumscribed round mass in the left hemithorax. Subsequent computed tomographic angiography revealed a large 65x55 mm left subclavian artery aneurysm positioned distal to the vertebral artery origin, complicated by a 2.5 cm thrombotic occlusion. Notably, collateral circulation had developed to maintain left axillary artery perfusion, with preserved flow in both the left vertebral artery and left internal mammary artery. Endovascular repair was planned using a dual-access approach through the right femoral and left radial arteries. After unsuccessful attempts to reach the aneurysm via the radial approach due to anatomical challenges, the intervention strategy was modified. A 10 mm vascular plug was successfully deployed in the left subclavian artery adjacent to the aneurysm via femoral access. Post-intervention angiography confirmed complete cessation of aneurysmal flow while maintaining critical vessel patency. At one-month follow-up, the patient reported significant improvement in her left upper extremity symptoms. Follow-up imaging demonstrated complete thrombosis of the aneurysm sac with continued preservation of flow in critical vessels. Cardiac function remained stable with preserved left ventricular ejection fraction of 60% and no new cardiovascular complications. This case illustrates several important aspects of managing complex subclavian artery aneurysms. First, it demonstrates the effectiveness of endovascular techniques in treating these challenging lesions while minimizing procedural risks. Second, it highlights the importance of maintaining procedural flexibility and having alternative approaches when initial strategies prove unsuccessful. Finally, it shows the possibility of achieving complete aneurysm occlusion while preserving critical vessel flow through careful device selection and positioning.

Conclusion: Endovascular plug occlusion represents an effective treatment option for subclavian artery aneurysms, even in cases complicated by thrombosis and challenging anatomy. Success depends on thorough pre-operative planning, technical flexibility, and careful attention to preserving critical vessel flow. Long-term follow-up remains essential to monitor for potential complications and ensure sustained clinical improvement.

Keywords: Subclavian artery aneurysm, endovascular repair, thrombosis, upper extremity ischemia

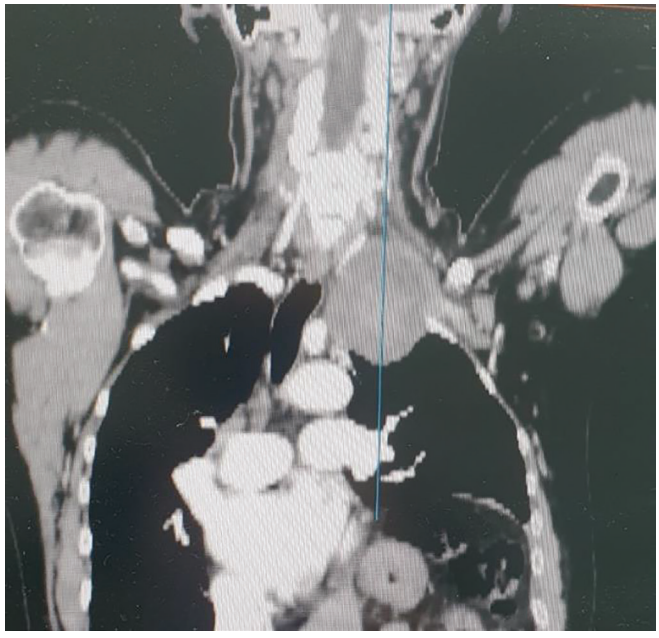

Figure 1. Computed tomography angiography of the thoracic aorta and upper extremities shows a left subclavian artery aneurysm distal to the origin of the vertebral artery

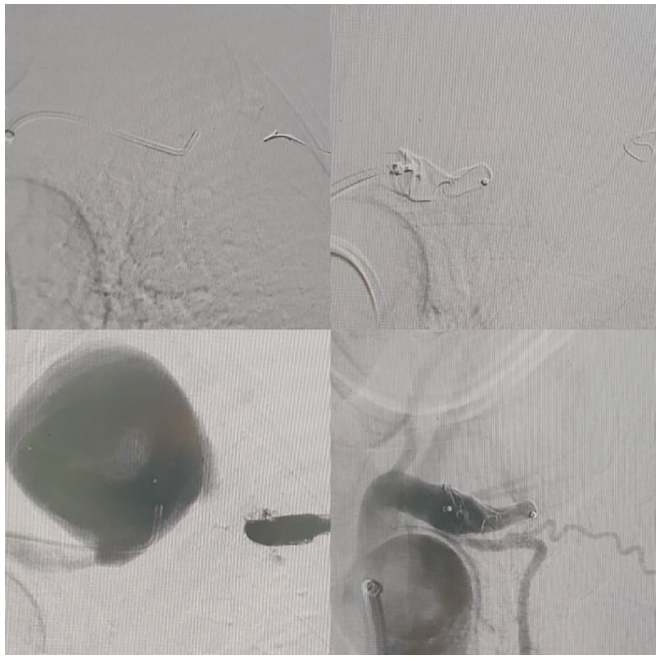

Figure 2. A destination sheath and vertebral catheter were positioned in the proximal subclavian artery via the femoral artery, while a right Judkins catheter was advanced into the distal subclavian artery through the radial approach (top left). Despite using stiff guidewires, access to the aneurysmal region from the distal end was unsuccessful (bottom left). A 10 mm vascular plug was placed proximal to the aneurysm sac through the vertebral catheter via the femoral route (top right). Post-procedural cine angiography confirmed preserved flow in both the left vertebral artery and the left internal mammarian artery, with near-complete occlusion of flow within the aneurysm sac (bottom right)

[OP-02]

Coil Embolization for LAD Aneurysm a New Approach to Coronary Artery Aneurysm Treatment

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Aim: Coronary artery aneurysm is an uncommon disease, whose natural history and therapeutic approach still controversial, medical therapy, surgical revascularization with or without ligation or exclusion and endovascular exclusion with membrane covered stents are all accepted and viable options. Here we report a new approach of a coronary aneurysm treated with stent assisted coil embolization.

Case Report: A hypertensive, diabetic, dyslipidemic, 67 years old lady with history of serebrovascular disease was admitted to our outpatient clinic with efor angina and proven ischemia on MPS performed in other clinic. Coronary angiography revealed a chronic total occlusion of the root cause analysis and retrograde filling from the left circumflex coronary artery (LCX), insignificant LCX lesion amd mid leukocyte adhesion deficiency (LAD) severe stenosis compined by large coronary aneurysm. Multidisciplinary team discussion reffered for coronary artery bypass graft surgery, the patient refused the surgery option at all. We decided to treat the more critically acute LAD lesion, we managed to pass LAD lesion by finecross microcatheter and Fielder® XT, with the predilatation and after that parking the coil microcatheter inside the aneurysmatic sac and employ the LAD stent in luminal size, then coil the sac then postdilate the stent, confirming the size by intravascular ultrasound and good final result was obtained.

Conclusion: Coronary artery aneurysms are infrequent malformations with yet unclear standert of treatment, the choice depends on clinical and anatomical carachteristic, the stent-assisted coil embolization as we describe may be a valuable option to manage patients presententing with such a coronary aneurysm.

Keywords: Coronary artery aneurysm, coil, atherosclerotic heart disease

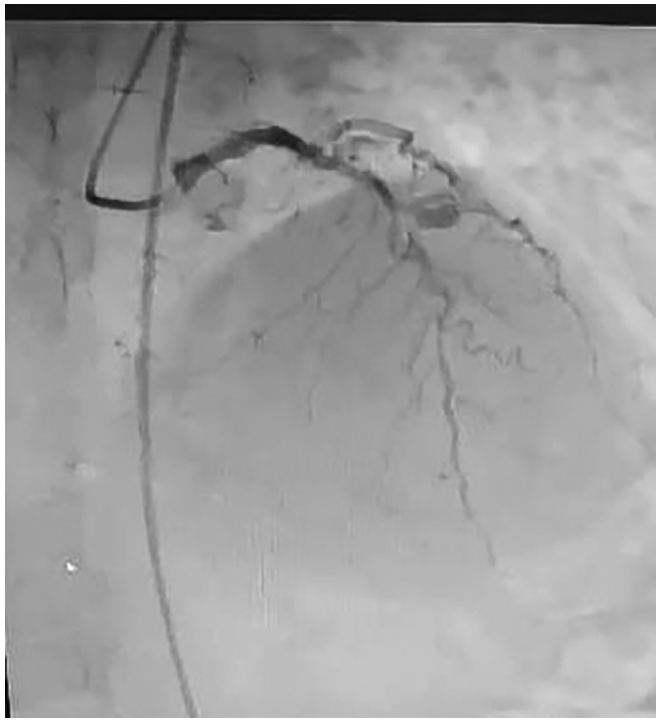

Figure 1. Diagnostic angiography

Figure 2. Final view

[OP-03]

Management of Guidewire Entrapment and Fracture During LMCA Percutaneous Coronary Intervention

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A 53-year old male patient was referred to our center with the diagnosis of non-ST elevated myocardial infarction. He had a history of chest pain which lasted for approximately six hours. He had chronic coronary artery disease and had been using acetylsalicylic acid and metoprolol for seven years. Coronary angiography and percutaneous coronary intervention (PCI) were planned for the patient after primary evaluation in the emergency room. There was no sign of myocardial ischemia in the electrocardiogram. The left ventricular ejection fraction was 60% and concentric left ventricle hypertrophy was observed by echocardiography. A diagnostic coronary angiography revealed a sever stenosis at the osteal segment of the left anterior descending artery. A 0.014" floppy guidewire was introduced into the leukocyte adhesion deficiency (LAD) artery and another guidewire was introduced into the left cicrumflex artery for prevention of the plaque shift A coronary stent was implanted into the lesion in the ostal segment of the LAD artery at 16 atmospheric pressure pressure as crosover LAD-left main coronary artery disease approach. After stent employment 4.5x12 NC balloon was used for post dilatation and a Thrombolysis In Myocardial Infarction 3 flow was obtained. The left circumflex coronary artery osteal was acceptable and no plaque shift seen. Unfortunately, at that time we were not be able to pull the wire in the LAD part back and it was obvious that it was entrapped in the distal part of the coronary artery. By using low profile coronary balloon we were be able to deliver the very distal part of the LAD then after forced pulling back, the system of both the wire and the balloon together were completly back. After that control angiography showed type 2 coronary perforation at the distal LAD segment. The patient hemodinamy was very good. Rewire the LAD again and long ballon inflation to occlude the vessel was performed, after 3 min of this manevure the control angiography reveled normal flow of the LAD without any contrast extavastion or myocardial blush. The patient then went on dual antiaggregant. After the procedure bedisde echocardiogram (ECHO) reveled no pericadiyal effusion. After 24 hour control ECHO was normal without any pericardial effusion. Guidewire entrapment and fracture is a rare but potentially life-threatening complication of percutaneous revascularization. Initial steps to retrieve an entrapped guidewire fragment may include administering intracoronary vasodilators with gentle attempts to release the fragment, but more complex percutaneous retrieval techniques should be attempted if the initial approach fails. Retained guidewire fragments in the coronary tree can lead to life-threatening complications. Percutaneous removal should be attempted first; although percutaneous removal is the preferred option, extensive manipulation within the coronary tree can lead to catastrophic complications, including coronary dissection, thrombosis, or embolization of the guidewire fragment. Therefore, prolonged attempts at percutaneous retrieval should be avoided. In the normal PCI procedures, the distal part of the guide wire should be always in mind and excessive pushing forward or deep distaly advancement should be avoided. Balloon tracking technique is cheep and safe enough to be the first maneuver to try.

Keywords: Guidewire entrapment, guidewire fracture, balloon tracking technique

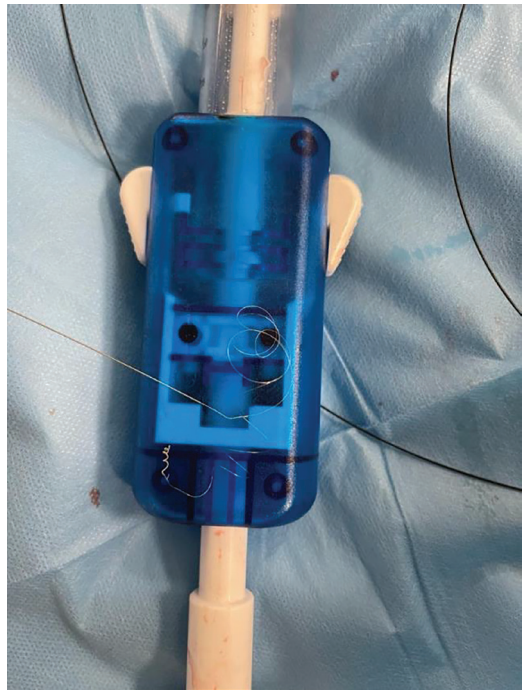

Figure 1.

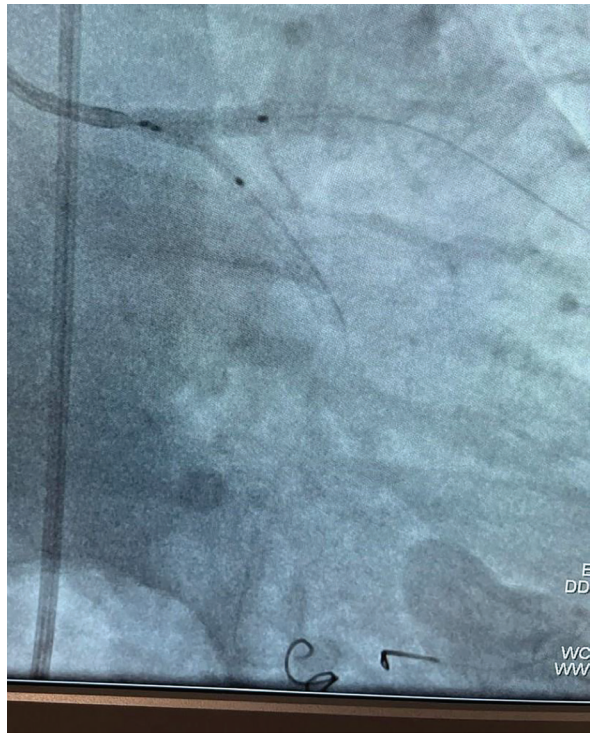

Figure 2.

[OP-04]

Intervention in LIMA-LAD Lesion with Drug-coated Balloon from Native LAD

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Aim: Drug-coated balloon (DCB) is a new device for percutaneous coronary intervention and has shown favorable outcomes due to its unique feature of delivering a high concentration of antirestenotic drug locally and rapidly without the use of a durable polymer or metal stent. Currently, many DCBs are coated with paclitaxel or sirolimus. DCB provides intervention without disrupting the vessel's natural position and without leaving permanent material inside the artery. It also reduces the need for long-term dual antiplatelet therapy.

Case Report: In our case, a 62-year-old male patient was referred to us with a diagnosis of non-ST-elevation myocardial infarction. Laboratory findings revealed elevated troponin levels, and there were no other laboratory findings to explain the condition. Electrocardiogram showed sinus rhythm with no elevation. Angiography showed a total occlusion in the saphenous vein graft to circumflex artery (Cx) and a severe lesion after left internal mammarian artery (LIMA)-left anterior descending artery (LAD) anastomosis. A 0.014 guidewire was advanced through LIMA to LAD, but balloon advancement was not possible due to tortuosity in LIMA. Then, using a 0.014 guidewire through native LAD, predilation was performed with a 1.5x15 balloon, followed by further predilation distally with a 2.5x15 NC balloon. After lesion preparation, a 2.5x20 DCB was applied for 3 minutes at 8 atmosphere. A type A dissection was observed, and patency was achieved. For the Cx lesion, predilation was performed with a 2.5x20 NC balloon, and a 2.5x30 DCB was applied for 3 minutes at 8 atm for drug absorption, resulting in patency. Both lesions were treated successfully with DCB.

Conclusion: Although DCB is more commonly used in small or in-stent restenotic lesions, as in our case, it can also be successfully used in difficult-to-access distal lesions.

Keywords: Drug-coated balloon, drug-eluting stent, coronary artery disease

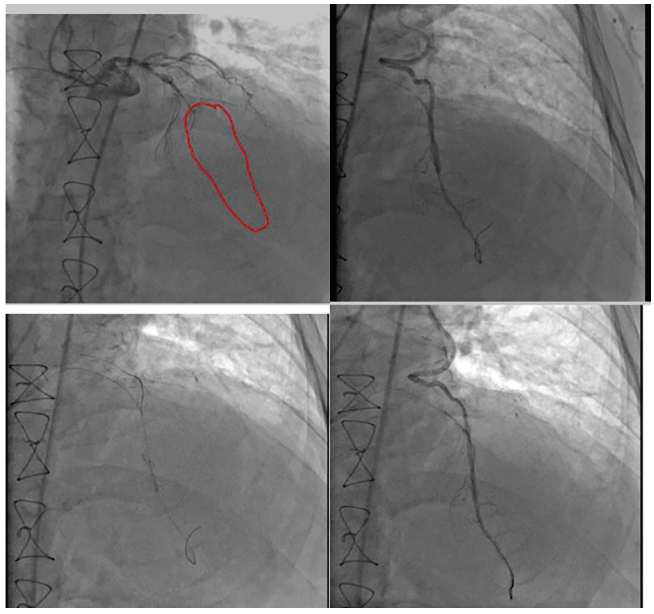

Figure 1. LIMA-LAD. Performing DCB on the distal LIMA-LAD lesion by crossing through the native LAD

DCB: Drug-coated balloon, LIMA: Left internal mammarian artery, LAD: Left anterior descending artery

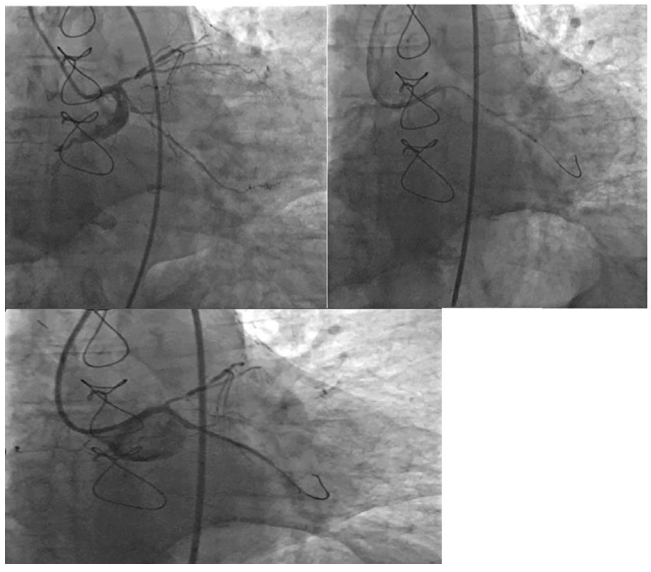

Figure 2. Opening of the Cx lesion. Before and after DCB intervention in the native Cx

DCB: Drug-coated balloon, Cx: Circumflex artery

[OP-05]

A Case of Fracture of a Surgically Implanted Bioprosthetic Valve

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Transcatheter aortic valve implantation is a treatment method that can be safely applied in patients who have previously received a surgically or percutaneously implanted bioprosthetic valve. In patients treated with the valve-in-valve transcatheter aortic valve implantation technique, the new valve cannot fully expand because it remains within the frame of the previously implanted bioprosthetic valve. In such cases, patient-prosthesis mismatch, high residual gradients, and an ineffective orifice area may occur. Bioprosthetic valve fracture is a procedure performed by inflating an ultra non-compliant balloon at the sewing ring of the previously implanted valve. This allows the newly implanted valve to expand fully, thereby achieving an effective and maximum orifice area.

Keywords: Transcatheter aortic valve implantation, valve-in-valve, bioprosthetic valve fracture

[OP-06]

The Role of Interventional Cardiology in the Treatment of Arterial Diabetic Foot Disease

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Aim: Peripheral arterial disease (PAD) is a term used to refer to occlusive atherosclerotic disease of the leg arteries. The incidence of PAD in diabetics is 2-4 times increased. Diabetes mellitus is the leading cause of non-traumatic lower extremity amputations, with rates of major amputations 5-10 times higher in non-diabetics. In our study, patients with diabetic PAD who underwent percutaneous revascularization were examined. The group that had to undergo amputation during follow-up was compared with the group that did not undergo amputation in terms of clinical parameters.

Methods: Our study is a retrospective, observational study. The study was conducted between March 2023 and April 2024. In our study, 100 patients with diabetic PAD and who underwent endovascular procedures were included. The results of patients who underwent amputation and those who did not undergo amputation during the follow-up were compared in two groups. The PAD severity of the patients was evaluated with current clinical scoring systems. Fasting blood sugar, Hba1c levels and renal functions of all patients were compared at baseline and at 6 months.

Results: A total of 100 patients (62 male and 38 female) were evaluated, 15 of whom underwent amputation during follow-up. Demographic characteristics and comorbidities of these two groups were found to be similar. When only the duration of diabetes was compared, it was found to be statistically significantly longer in the amputation group. In addition, HbA1c value, which is an indicator of poor blood sugar control, was statistically significantly higher (mean HbA1c 8.8 vs. 10.5 $p<0.001$) in the amputation group. In addition, it was determined that creatinine values (mean creatinine 0.89 vs. 1.52 $p<0.001$) were higher and glomerular filtration rate (mean GFR; 89 vs. 47 $p<0.001$) decreased statistically significantly in the amputation group. All parameters indicating anatomical and clinical severity in PAD patients were worse in the amputation group. Rutherford grade 3 / category 5 and grade 3 / category 6 ($p<0.001$) percentages were significantly higher in the amputated group than in the other patients. Fontaine grade 4 ($p<0.001$), Wagner's grade 4 ($p<0.001$), Wound, Ischemia, and foot Infection grade 3 ($p<0.001$) and TransAtlantic Inter-Society Consensus II type D ($p<0.001$) percentages were significantly higher in the amputated group than in the other patients.

Conclusion: When these results are evaluated in general, it is important for physicians to question PAD symptoms. In particular, patients with PAD risk factors, especially diabetic patients, should be given special attention. Early diagnosis and treatment (medical/interventional) are very important in these patients to reduce the risk of amputation.

Keywords: Peripheral artery disease, diabetes, diabetic foot, below-knee interventional interventions

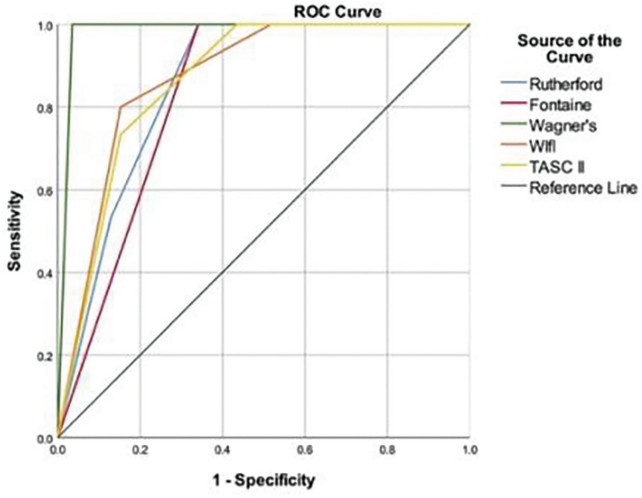

Figure 1. ROC curves of the classification systems to predict amputation
ROC: Receiver Operating Characteristic

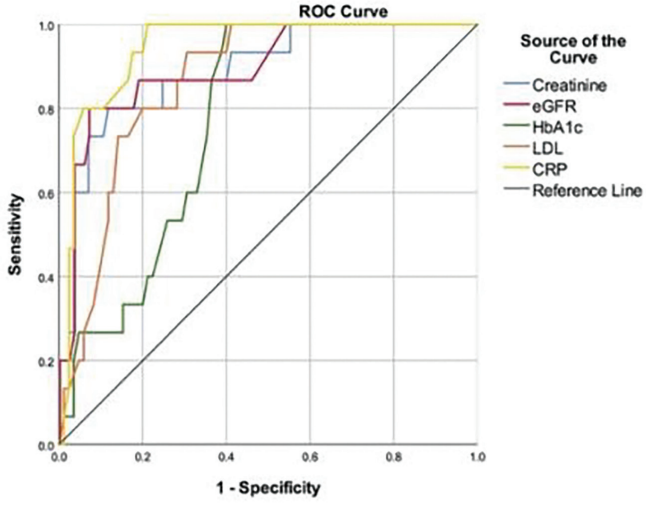

Figure 2. ROC curves of the baseline laboratory measurements to predict amputation
ROC: Receiver operating characteristic

Table 2. Performance of classifications to predict amputation, ROC curve analysis

Classification	Rutherford	Fontaine	Wagner's	WIfI	TASC 2
Cut-off	Grade 3	Grade 4	Grade 4	Grade 3	Type D
Sensitivity	100.00%	100.00%	100.00%	80.00%	73.33%
Specificity	65.88%	65.88%	96.47%	84.71%	84.71%
Accuracy	71.00%	71.00%	97.00%	84.00%	83.00%
PPV	34.09%	34.09%	83.33%	48.00%	45.83%
NPV	100.00%	100.00%	100.00%	96.00%	94.74%
AUC (95% CI)	0.856 (0.780-0.931)	0.829 (0.749-0.910)	0.982 (0.959-1.000)	0.872 (0.793-0.950)	0.865 (0.789-0.942)
p	<0.001	<0.001	<0.001	<0.001	<0.001

ROC: Receiver operating characteristic, PPV: Positive predictive value, NPV: Negative predictive value, AUC: Area under ROC curve, CI: Confidence interval

[OP-07]

Case Report and Literature Review: Treatment of Severely Calcified *de novo* Coronary Lesion with Intravascular Lithotripsy Followed by Stent-free drug-coated Balloon Therapy

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Aim: Calcified coronary lesions (CCL) remain a great challenge for percutaneous coronary intervention (PCI) despite improvements in interventional techniques. Debulking devices such as rotational atherectomy (RA), orbital atherectomy and recently intravascular lithotripsy (IVL) have been used to facilitate the preparation of CCLs improving stent area. Although PCI with drug-eluting stent (DES) implantation represents the most common approach for revascularization in these cases, outcomes in calcified lesions are often less than optimal. In recent years, drug-coated ballon (DCB) strategy has emerged as an effective alternative in scenarios such as in-stent restenosis, small vessel disease. Moreover, previous studies have shown that the safety and efficacy of DCB treatment after RA for CCLs might be comparable to those of DES following RA. Here we present a case of a calcified *de novo* lesion treated successfully with DCB following IVL.

Case Report: A 63-year-old male without prior history of diabetes or hypertension presented with recent-onset fatigue and exertional shortness of breath, particularly over the past two weeks. Coronary computed tomography angiography revealed a significant stenosis in the left anterior descending artery (LAD), and invasive coronary angiography confirmed a heavily calcified 90% stenosis in the proximal LAD and a 30% stenosis in the mid segment (Figure 1). No other significant coronary lesions were observed. PCI to LAD was planned. Due to the severe calcification, IVL balloon (Shockwave C2) was deployed. After confirming satisfactory lesion modification, a 3.5x30 mm paclitaxel-coated balloon (Prevail, Medtronic) was applied, achieving optimal angiographic result (Figure 2). At 4-month follow-up, the patient remained asymptomatic, with no adverse cardiac events. It is well known that CCLs have a higher incidence of restenosis than non-calcified lesions following PCI with DES. Recent studies reported that clinical outcome after PCI using debulking devices prior to DCB treatment for severe calcification was not inferior compared with DES implantation. In a single-center cohort study carried out, which compared clinical outcomes for a total of 166 severely CCLs treated with DCB or DES following RA, target vessel revascularization was not significantly different in the DCB group compared to DES. Moreover, in a recently published meta-analysis evaluating five studies, the use of stent-less DCB strategies offers an efficacy and safety profile comparable to that of DES implantation in CCLs especially after adequate plaque preparation. IVL is a novel therapy for the treatment of severely calcified plaques by delivering circumferential pulsatile acoustic pressure waves to modify calcification. Previous clinical studies revealed the efficacy and safety of IVL prior to heavily calcified lesions and moreover, acute luminal gain with calcium fracture by IVL may positively affect clinical outcome.

Conclusion: Stent-less PCI by using a combined IVL and DCB approach-defined as DCB only strategy, might be a potential revascularization strategy for patients with heavily CCLs. Further studies are needed to definitely address this strategy.

Keywords: Coronary artery disease, percutaneous coronary intervention, drug coated ballon, drug-eluting stent

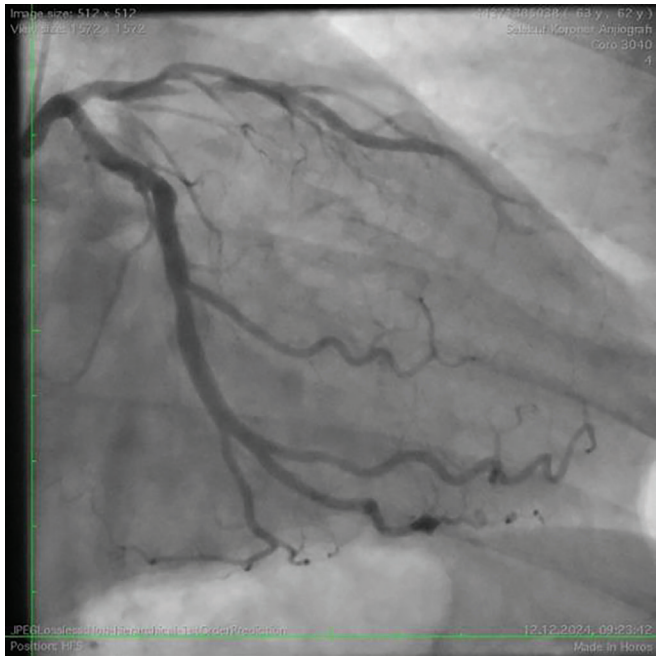

Figure 1. Coronary angiography confirmed a heavily calcified 90% stenosis in the proximal left anterior descending artery and a 30% stenosis in the mid segment

Figure 2. Optimal result after intravascular llithotripsy followed by drug-coated balloon

[OP-08]

Association Between Perceived Stress and Post-procedural Arm Pain Following Transradial Coronary Angiography: An Observational Cohort Study

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Aim: Transradial coronary angiography (TRA) has become the preferred access route for diagnostic and interventional cardiac procedures due to its favorable safety profile. However, a subset of patients experience post-procedural arm pain, which may negatively influence psychological well-being. This study aimed to investigate the association between perceived stress levels and the presence of arm pain following TRA.

Methods: In this observational cohort study, 300 patients undergoing elective coronary angiography via the right radial artery were enrolled. Patients with pre-existing psychiatric disorders, chronic pain syndromes, or recent upper limb trauma/surgery were excluded. Within the first week after the procedure, participants completed the 10-item perceived stress scale (PSS-10). Arm pain was assessed concurrently using a visual analog scale (VAS). Patients were divided into two groups: those with arm pain (n=34, 11.3%) and those without (n=266, 88.7%). The primary outcome was the comparison of perceived stress levels between the groups and the correlation between pain intensity and stress scores.

Results: The mean age of the cohort was 59.8±9.4 years, and 62% were male. Patients with arm pain had significantly higher mean PSS scores compared to those without pain (21.4±5.3 vs. 16.9±4.8, $p<0.001$). A moderate positive correlation was observed between VAS scores and PSS scores among all participants (Spearman's rho=0.46, $p<0.001$). Multivariate linear regression analysis, adjusting for age, gender, diabetes, and baseline anxiety status, confirmed that post-procedural arm pain was an independent predictor of elevated stress ($\beta=0.41$, $p=0.001$).

Conclusion: Arm pain following TRA is associated with higher levels of perceived stress during the early recovery period. The findings highlight the importance of recognizing and managing post-TRA arm discomfort not only as a physical issue but also as a potential contributor to psychological distress. Incorporating stress assessment tools like the PSS into routine post-procedural care may improve patient-centered outcomes.

Keywords: Transradial angiography, perceived stress scale, post-procedural pain, psychological stress, radial artery access

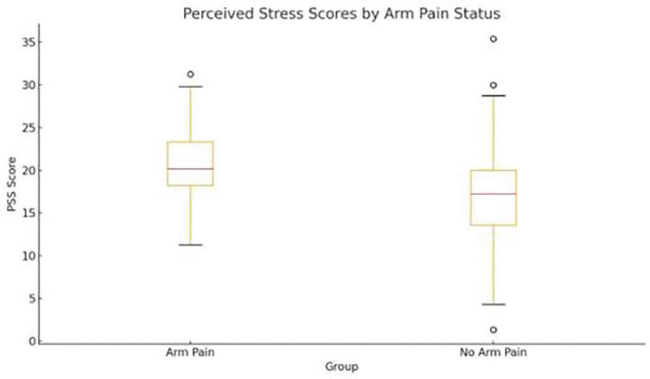

Figure 1. Comparison of perceived stress scores between patients with and without post-procedural arm pain following transradial coronary angiography

[OP-09]

The Effect of Thrombus Elimination Methods on Prognosis in Patients with Acute Coronary Syndromes with High Thrombus Burden

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Aim: The extent of coronary thrombus is acknowledged as a critical determinant of both immediate and long-term cardiovascular complications in acute coronary syndrome cases. Although various interventional and pharmacological approaches have been developed, managing intracoronary thrombi remains suboptimal. Therefore, recognizing the factors that influence thrombus burden is essential for predicting cardiovascular risks and optimizing percutaneous coronary intervention to reduce procedural complications. Considering the available literature, this study aims to explore the impact of thrombus removal strategies on the clinical outcomes of patients presenting with a significant thrombus burden.

Methods: Four hundred sixty-six patients who were admitted to University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital with acute coronary syndrome between 2020 and 2025, had high thrombus burden on angiographic imaging, and used at least one thrombus elimination method were included in the study. Demographic data, comorbidities, laboratory parameters of the patients were recorded. All patients with thrombus were given GP2b3a inhibitors. Thrombus aspiration was performed in 71 patients. Thrombolytics were given to 28 patientsPatients were divided into 2 groups according to the 30-day combination (cardiovascular death, recurrent MI, HF repeat hospitalization, stroke, major bleeding).

Results: The mean age of the study population was 58±13 years, 378 (81.2%) patients were male and was similar in all groups (p=0.106). There was no significant difference between the group in which the composite outcome was achieved and the group in which it was not achieved in terms of gender distribution, hypertension, diabetes mellitus, cerebrovascular event peripheral artery disease, smoking, previous MI/CABG, atrial fibrillation, Coronavirus disease-2019 infection. Hyperlipidemia was statistically significantly higher in the composite event group (p=0.02). According to the composite event groups, there was a statistically significant higher rate of being in a cardiogenic state at the time of admission (2.2% vs. 18.8% p<0.001), having an anteriorly localized MI (74% vs. 59%, p=0.002), having a lesion in the left anterior descending artery (60.6% vs. 78.6% p<0.001) and right coronary artery (58.7% vs. 39% p<0.001) vessels, and having a low ejection fraction (19.6% vs. 68.2%, p<0.001). Among laboratory values, initial and peak troponin and creatinine values were significantly higher in the group with composite events, while hemoglobin values were significantly lower in those with composite events. Angiographic thrombus burden was similar between the groups. There was no significant difference in the balloon, stent+balloon, and stent arms among the methods applied during the intervention.It was observed that administering thrombolytic in addition to thrombus GP2b3a inhibitor during the procedure (p=0.605) or using a thrombus aspiration catheter (p=0.577) did not cause a significant change in the composite endpoint.

Conclusion: According to the present study, thrombus elimination methods applied at high thrombus load did not cause a significant difference at the 30-day composite point, and no significant effect on prognosis was detected.

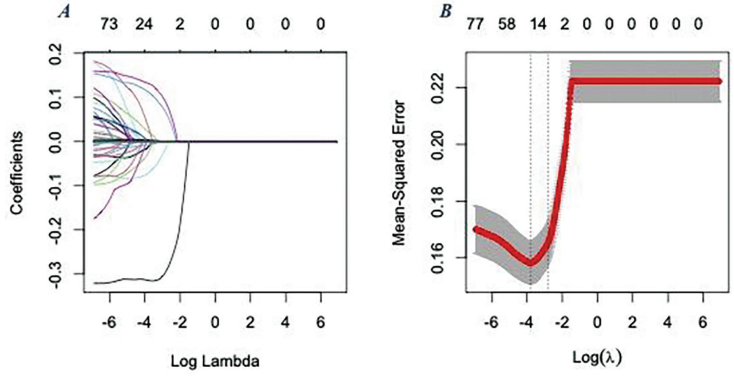

Figure 1. The least absolute shrinkage and selection operator (LASSO) penalized feature selection and importance of thecohort. (A) Coefficient profile plots demonstrate how the size of coefficients for covariates decreases as the λ penalty increases. Factors andtheir regression coefficients are chosen for the model based on the optimal λ value identified by the LASSO model. (B) The plot presentsthe distribution of minimum mean squared errors along with their respective penalization lambda values in the LASSO-penalized model. Coloured error bars indicate standard errors

Table 1. The relationship between demographic, laboratory and angiographic data of patients who underwent thrombus elimination methods due to high thrombus burden and 30-day composite outcome

	Composite event not occured	Composite event occured	p value
Age, mean (SD)	56.9 (11.8)	60.5 (13.2)	**0.003**
Gender (male), n (%)	26 (83.3)	118 (76.6)	0.106
Diabetes mellitus, n (%)	82 (26.3)	951	0.153
Hypertension, n (%)	128 (41)	57 (37)	0.464
Hyperlipidemia, n (%)	55 (63.9)	42 (70.6)	**0.022**
CVE	7 (2.2)	4 (2.6)	1.000
PAD	6 (1.9)	3 (1.9)	1.000
Prior MI, n (%)	76 (24.4)	42 (27.3)	0.571
Prior CABG, n (%)	23 (7.4)	11 (7.1	1.000
Current smoker, n (%)	62 (19.9)	30 (19.5)	1.000
Atrial fibrilation, n (%)	18 (5.8)	11 (7.1)	0.709
HFrEF	61 (19.6)	105 (68.2)	**<0.001**
Anterior location	184 (59.0)	114 (74)	**0.002**
LMCA lesion	12 (3.8)	13 (8.4)	0.06
LAD lesion	189 (60.6)	121 (78.6)	**<0.001**
Cx lesion	107 (34.3)	54 (35.1)	0.951
RCA lesion	183 (58.7)	60 (39)	**<0.001**
Cardiogenic shock	7 (2.2)	29 (18.8)	**<0.001**
	1.7 (1.4-2.3)	1.2 (0.7-1.5)	**<0.001**
Direct stenting	6 (1.9)	2 (1.3)	0.913
Balloon plus stenting	247 (79.2)	115 (74.7)	0.329
Balloon only	51 (16.3)	27 (17.5)	0.849
Thrombus aspiration	45 (14.4)	26 (16.9)	0.577
Thrombolytic therapy	17 (5.4)	11 (7.1)	0.605
Initial thrombus grade 4-5	203 (65.1)	100 (64.9)	1
Total stent length	29.0 (16.0 to 48.0)	29.0 (3.0 to 47.3)	0.763
Distalembolization	54 (17.3)	38 (24.7)	0.079
Initial cTnI	129.0 (24.5 to 703.8)	355.5 (34.0 to 3496.8)	**<0.001**
Peak cTnI	1886.0 (674.0 to 4329.0)	5634.5 (2395.8 to 9823.3)	**<0.001**
Platelets	246.0 (202.5 to 291.5)	261.5 (221.2 to 325.5)	0.009
Hemoglobin	13.8 (2.0)	13.0 (2.4)	**<0.001**
Creatinine, mg/dL	0.8 (0.7 to 1.0)	0.9 (0.8 to 1.2)	**<0.001**

CVE: Cerebrovascular event, PAD: Peripheral artery disease, HFrEF: Heart failure with reduced ejection fraction, LAD: Left anterior descending, Cx: Left circumflex, RCA: Right coronary artery, MI: Myocardial infarction, CABG: Coronary artery bypass graft, cTnI: Cardiac troponin 1

[OP-10]

Is the Balloon Always Used for Dilatation? Two Case Series in Our Clinic Where Balloon Trap Straightening was Performed

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Aim: Wiring is important in all techniques in coronary angiography. In bifurcation lesions, it may be difficult to wire in side vessels that originate from the main vessel at a reverse angle (wide angle) and have serious stenosis in their ostium. In reverse angled vessels, basically; reversed wire technique [(RWT), bringing the wire in the form of a hairpin and wiring], large bend (giving the wire a wide angle), angulated microcatheter (shaping the microcatheter), balloon trap straightening (BTS) can be used. Among these methods, BTS and RWT are compared to each other in the literature because they are used in much more similar indications. In RTW, the wire is given a wide angle in the form of a hairpin, the wire is sent to the distal of the side branch and the side branch is wired while pulling it back. In RWT, the wire may be deformed while being advanced and may cause vessel dissection. BTS can be used to solve the difficulties in RWT. Another technique in the same indication is inflating the balloon in the main vessel, temporarily cutting off the blood flow to the main vessel with the balloon and wiring it to the side branch. This method is called BTS. In this case series, we will talk about our experiences in cases we wired with BTS.

Case Report: Our first case is a 52-year-old female patient with known congenital adrenal hyperplasia, HL and asthma. He applied to our outpatient clinic with a complaint of central chest pain with exertion that had worsened in the last 3 months. Transthoracic echocardiogram was normal. Electrocardiogram (ECG) SR, anterior T wave negativity was present. In the first coronary angiogram (CAG), there was a lesion in the proximal 60-70% of the leukocyte adhesion deficiency (LAD). Antianginal treatment was prescribed. Since the patient's complaints continued, it was decided to visualize the LAD lesion with intravascular ultrasound (IVUS). CAG performed using 6F-JL 4 from the femoral artery; the lesion in the proximal 60-70% of the LAD was passed with a floppy wire. IVUS imaging was requested for D1, but the lesion could not be passed with the IVUS catheter. Thereupon, balloon dilatation was planned. BTS technique was used to wire the retroverse angled D1 (Figure 1). For BTS, LAD 2.5x10 mm NC balloon was inflated and then floppy D1 was wired. Predilation was performed on D1 with 2.5x10 mm and 3.25x10 mm scoring balloons. Calcified plaque and superficial fracture were observed with IVUS. 3.5x25 DES was implanted from left main coronary artery (LMCA) to LAD. A pot was made with 3.5x15 mm NC in the distal stent and 4.0x15 mm NC in the LMCA-LAD section. Our second case, a 61-year-old male patient with known CAD, peripheral artery disease, hypertension and HL, applied to our outpatient clinic with the complaint of easy fatigue with exertion. ECG, NSR, FM, peripheral pulses were weak. The patient was planned to have elective CAG+PAG. CAG: LMCA normal LAD: osteal 80%, Cx: proximal 50-60% distal: 70% RCA: distal 50-60%; 4.0x21 mm DES was successfully implanted in LAD. PAG: right SFA CTO and left SFA CTO, revascularization was performed in another session. Since the patient's complaints continued, PCI was planned for Cx. CAG with 6F-JL4 from the radial: Cx 80% long lesion could be crossed with ES wires (whisper/choice). When conventional methods were not successful in OM branch wiring, BTS technique was used (Figure 2). Cx vessel was nominally inflated with 2.0x12 mm PTCA, then OM was passed with Sion-black wire, then 2.0x20 mm, 2.25x22 mm balloons were placed in Cx. 2.5x28 mm, 2.75x32 mm and 3.0x26 mm DES were implanted overlapping. It was postdilated with 3.5x12 mm NC.

Conclusion: The most disadvantageous situations for BTS seem to be ischemia of the vessel where the balloon is used, the risk of dissection of the vessel where the balloon is used, but no complications were observed in our cases. In order to avoid these complications in our cases, we paid attention to balloon inflation for less than 45 seconds, selection of a balloon with a diameter lower than the vessel diameter (balloon size/vessel diameter <1) and balloon inflation at nominal ATM (max 7-8 ATM). Of course, more randomized controlled studies with more cases are needed to reach the most accurate result. Like every wiring method, the BTS method has its own advantages and disadvantages. Depending on the operator experience and the anatomy of the vessels, the BTS method can be life-saving.

Keywords: Balloon trap straightening, wide angle side branch, PTCA, reversed wire technique

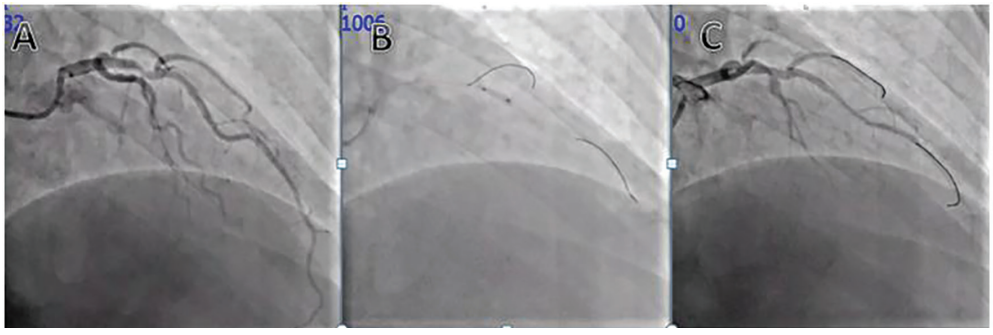

Figure 1. Stenting of a proximal LAD lesion with protection wiring of the D1 brach
LAD: Leukocyte adhesion deficiency

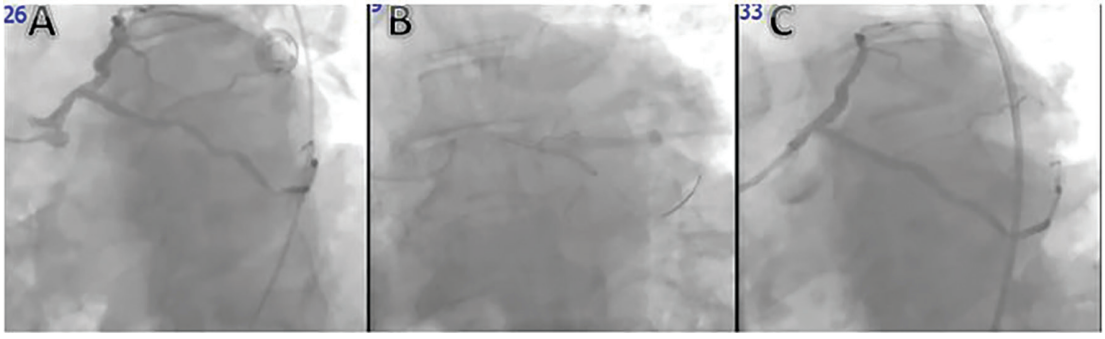

Figure 2. Stenting of a long lesion in the circumflex artery with protection wiring of the obtuse marginal branch

[OP-11]

Unopened and Uncrushed Stent in the Left Main Coronary for Seven Years

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Intracoronary unopened and uncrushed stents are very rare but quite dangerous complications of percutaneous coronary intervention. Sometimes, operators may not notice this great danger during the procedure. If care is not taken, this complication, which can be missed, can progress to stent embolization, myocardial infarction and patient death. Stent stripping from the balloon most frequently occurs when there is difficulty in delivering the stent to the target lesion and when the undelivered stent is pulled back into the guide catheter. This stent stripping may not be noticed by operators during the procedure. Stent embolization or stent misplacement has been reported in 0.3% to 1.2% of percutaneous coronary interventions in the literature. Stents that are stripped from the balloon can be successfully retrieved with a snare. However, if it cannot be removed with the snare, an alternative is to place a balloon inside the stent and open it where it is located, or if this is not possible, a balloon can be passed next to the stent and attached to the wall, or surgical methods can be used. However, the short and long-term results of these treatment methods are still unknown. During stent removal, undesirable situations such as damage to the vascular endothelium, dissection or perforation in the vessel may be encountered. It is unclear how safe the removal procedure will be, especially if the stents remain in place for a long-time. We present a rare case of a coronary stent that was stripped and unnoticed during percutaneous intervention in the left main coronary artery 7 years ago. A 51-year-old male patient applied to our clinic with chest pain. Coronary angiography was planned for the male patient who had known hypertension, diabetes mellitus, smoking and a history of coronary stent surgery 7 years ago. When the reports of the patient's coronary angiography performed in 2017 with the diagnosis of non-stemia were examined, it was seen that a 2.5x29 mm nexgen stent was implanted in the right coronary artery (RCA), a 2.5x22 mm orsiro stent was implanted in the left circumflex artery (LCX), and a 2.25x8 mm nexgen and 2.5x18 mm orsiro stent was implanted in the diagonal (D1) artery. No stent detachment was noted in the report by the operator or an unopened stent in the left main coronary. It was learned that the patient was discharged with ticagrelor, acetylsalicylic acid, rosuvastatin, metformin, metoprolol and losartan treatment after the procedure and that he had no active complaints. It was observed that ticagrelor was discontinued from the dual anteaggregant treatment and switched to single acetylsalicylic acid treatment 1 year after the procedure. In the coronary angiography performed by us on the patient, an unopened and uncrushed stent extending from the left main coronary to LCX was seen (Figure 1). The stents were observed as open in the lad and LCX and non-critical lesions were seen. The RCA was seen to be chronically totally occlusion. When the literature was reviewed, there were successful removal procedures performed for misplaced or unopened stents, but these also included the presence of a suitable area for the stent to be captured (such as aortic-osteal stent placement). Although the removal procedures were performed in the early period, it was seen that many cases resulted in complications such as acute vessel occlusion and coronary dissection. Based on our previous clinical experience and considering these reasons, the patient did not undergo further intervention. Myocardial perfusion scintigraphy (MPS) was requested from the patient to investigate the presence of ischemia. The MPS result revealed ischemia in the inferolateral region (Figure 2). The patient was consulted to the CVC. Since surgical intervention was not considered, it was evaluated in our clinic's cardiology council. Medical follow-up decision was made. After one year, we see that single antiaggregant treatment allows an unopened and uncrushed stent to remain without thrombosis for a long-time like 7 years. This is a case report of an unopened and uncrushed stent remaining without thrombosis for a long-time like 7 years in a normal LMCA, which can be seen quite rarely.

Keywords: Complication, coronary, forgotten, stent, seven years

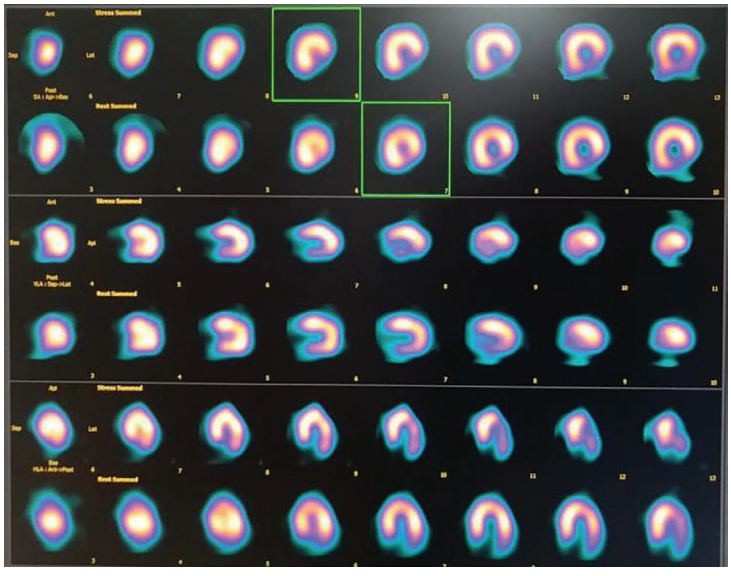

Figure 1. Ischemia in the inferolateral region in myocardial perfusion scintigraphy (MPS). In the MPS taken after coronary angiography, findings in favor of ischemia are observed in the inferolateral region, consistent with the localization of the unopened stent

[OP-12]

One-year Outcome of LBBAP Treatment and Our Arrhythmia Records

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Aim: Left bundle branch pacing (LBBAP) is a new pacemaker method used to provide cardiac resynchronization therapy (CRT). Whether LBBAP is effective in predicting response to treatment in patients with heart failure (HF) and its effects on long-term clinical outcomes are not fully known. The aim of this study was to evaluate the 1-year follow-up results of patients who underwent LBBAP-CRT in terms of rhythm disturbances and clinical outcomes at the end of the first year.

Methods: This study included 27 patients who had ejection fraction (EF) <35% and QRS duration >150 ms, who showed clinical symptoms of HF and underwent LBBAP-CRT treatment in our center between 20.02.2023 and 14.03.2024. Patients with permanent atrial fibrillation (AF) were excluded from the study. Patients were evaluated for response to CRT treatment at 0, 1 and 6 months. Good response to LBBAP treatment was defined as an echocardiographic increase in EF by 5% compared to baseline during follow-up.

Outcome: Primary endpoint: It was determined as the proportion of CRT patients who responded to LBBAP.

Secondary endpoints: It was evaluated as all-cause mortality and HF hospitalization events. Non-sustained VT, AF/AHRE and inappropriate shock recordings were followed in the 1-year battery controls of the patients.

Results: A total of 27 patients were included in the study. Three patients died within the 1-year period and battery control could not be performed. In the battery controls of 24 patients who survived for 1 year:

- Non-sustained VT in 7 patients,
- AF/AHRE in 4 patients,
- Inappropriate shock was detected in 2 patients (in patients with AF/AHRE).
- No event recording was observed in 13 patients.

Patients who responded well to LBBAP treatment (n=20) had a lower mean age compared to non-responders (n=7) (63.2±10.2 vs. 72.4±4.1, p=0.003). While there was no significant difference between the groups in terms of NT-proBNP level and left atrial diameter, albumin level was found to be significantly higher in the group that responded well (4.1±0.4 vs. 3.7±0.5, p=0.034). In addition, in terms of primary outcome, mortality and hospitalization rates were found to be significantly lower in the group that responded well to LBBAP treatment (10% vs. 57.1%, p=0.024).

Conclusion: In HF patients treated with LBBAP treatment, 1-year mortality and hospitalization rates were found to be lower in those who responded well to treatment. In addition, non-sustained VT and AF/AHRE development are frequently seen in terms of rhythm disorders. These data can contribute to patient selection before LBBAP procedure and guide clinical practices.

Keywords: LBBAP, arrhythmic recording, DEFKY

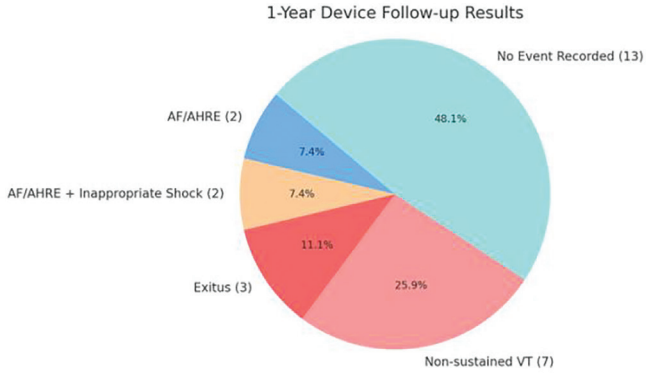

Figure 1. Our arrhythmic recordings
AF: Atrial fibrillation

Table 1. Comparison between patients with good and poor response to LBBAP therapy

Variable	Poor response (n=7)	Good response (n=20)	p value
Age±SD	72.4±4.1	63.2±10.2	0.003
Hypertension, n (%)	5 (71.4%)	14 (73.7%)	1.000
Diabetes, n (%)	3 (42.9%)	12 (60%)	0.662
Coronary artery disease, n (%)	3 (42.9%)	7 (35%)	1.000
Non-ischemic dilated cardiomyopathy, n (%)	4 (57.1%)	13 (65%)	1.000
NT-proBNP, pg/mL [IQR]	2873 [1468-14549]	1158 [386-3000]	0.130
Albumin, g/dL ± SD	3.7±0.5	4.1±0.4	0.034
Creatinine, mg/dL [IQR]	1.1 [0.8-1.5]	1.0 [0.8-1.4]	0.987
Baseline EF, % ± SD	25.5±7.2	25.8±5.7	0.933
Follow-up EF, % ± SD	27.0±7.5	43.2±8.8	<0.001
sPAP, mmHg [IQR]	40 [30-55]	29 [25-38]	0.145
Right atrial diameter, mm [IQR]	37.0 [36-45]	34.5 [34-38]	0.152
Left atrial diameter, mm ± SD	44.1±6.0	40.5±4.6	0.115
LV diastolic diameter, mm ± SD	62.1±7.6	59.8±6.8	0.478
Septal thickness, mm [IQR]	10 [10-11]	10 [10-12]	0.735
TAPSE, mm ± SD	18.4±3.4	21.0±2.8	0.057
Secondary endpoint events, n (%)	4 (57.1%)	2 (10%)	0.024

SD: Standard deviation, IQR: Interquartile range, TAPSE: Tricuspid Annular Plane Systolic Excursion

[OP-13]

Successful Guidewire Crossing and Stent Expansion in a Case of Stent Dislodgment in the Right Coronary Artery: A Stepwise Approach

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Aim: Stent dislodgment is a rare but challenging complication during percutaneous coronary intervention (PCI). Management can be complex, particularly when the guidewire fails to advance distally through the stent due to structural deformities. In this report, we present a case of successful guidewire crossing and stent expansion using a parallel wire technique and intravascular ultrasound (IVUS)-guided optimization.

Case Report: A 62-year-old male patient was referred to our Interventional Cardiology Unit at Selçuk University Faculty of Medicine after a failed PCI attempt at an external center. One year prior, the patient had undergone PCI for a mid-right coronary artery (RCA) lesion, during which the stent had dislodged within the artery. Multiple subsequent interventions were unsuccessful in advancing a guidewire beyond the stent for further dilation or stent crush. Coronary angiography revealed a previously deployed stent in the mid-RCA with an ectatic segment and significant vessel bending. Initial attempts with a Sion guidewire showed apparent angiographic progression through the stent; however, a low-profile balloon could not be advanced, suggesting a sub-strat pathway rather than true central passage. A double-lumen catheter was then used to facilitate a floppy guidewire crossing through a different region of the stent struts, yet distal progression remained unsuccessful. To overcome this challenge, we employed a parallel wire technique, leaving the Sion wire in place while attempting passage with a Runthrough guidewire. This approach allowed us to successfully navigate through the stent without engaging the struts, providing a more favorable wire trajectory. Once the Runthrough wire reached the distal RCA, a low-profile balloon was easily advanced through the stent, confirming a true lumen passage. Stepwise balloon dilations were performed, and IVUS imaging was utilized to evaluate the luminal expansion. IVUS revealed a reference vessel diameter of approximately 4.5 mm in the healthy segment, guiding our final decision to post-dilate with a 4.5x12 mm non-compliant balloon. The stent was expanded without strut deformation, achieving an optimal result. Finally, a 4.5x13 mm drug-eluting stent was implanted distally to overlap with the previous stent. The final IVUS examination confirmed full stent expansion and apposition, ensuring an optimal long-term outcome.

Conclusion: This case highlights the importance of strategic guidewire selection and parallel wire techniques in cases of stent dislodgment and challenging wire passage. Additionally, IVUS guidance plays a critical role in ensuring precise lesion assessment and optimal stent deployment. Our stepwise approach resulted in a successful intervention, offering valuable insights for the management of complex PCI cases.

Keywords: Coronary intervention, guidewire crossing, percutaneous coronary intervention, stent dislodgment, stent optimization, IVUS guidance

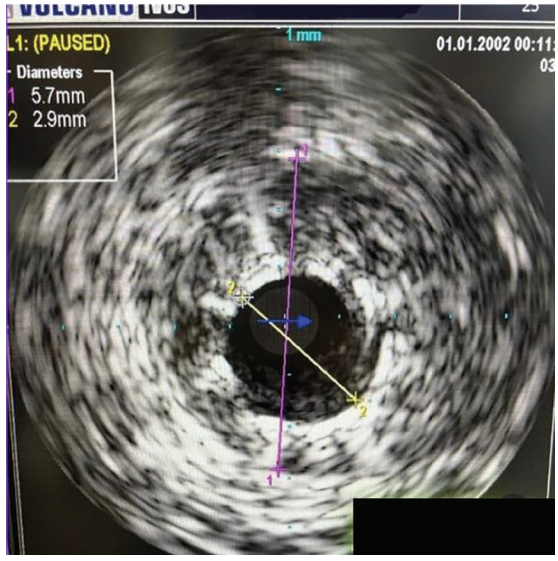

Figure 1. Intravascular ultrasound image before percutaneous coronary intervention

Figure 2. Intravascular ultrasound image after percutaneous coronary intervention

[OP-14]

Case Report: Coronary Bypass Graft Intervention with the Unconventional Use of a Simmons Catheter

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Aim: A 62-year-old male presented with chest pain. His history included coronary artery bypass graft surgery (CABG) in 2020 with LIMA to left anterior descending coronary artery (LAD), saphenous vein graft (SVG) to D1, and SVG to OM, along with diabetes mellitus and hypertension. Medications included acetylsalicylic acid (100 mg/day), ramipril (5 mg/day), bisoprolol (5 mg/day), and oral antidiabetics. Electrocardiography showed sinus rhythm (76 bpm) with nonspecific ST-T changes. Echocardiography revealed an EF of 50% without regional wall motion abnormalities. Troponin was elevated (550 ng/L), indicating non-ST-elevation myocardial infarction. The patient was admitted for urgent coronary angiography.

Case Report: Coronary angiography findings. Native coronaries:

LMCA: Normal

LAD: 100% occlusion distal to D1

CX: 100% occlusion distally, collateralized by right coronary artery (RCA)

RCA: Plaque present

Bypass grafts:

LIMA to LAD: Patent

SVG to D1: Thrombosed lesion at the graft trunk

SVG to OM: Absent. Intervention:

The thrombosed SVG to D1 was identified as the culprit lesion. Standard coronary catheters (Judkins left, Judkins right, Amplatz) failed to engage the graft ostium due to challenging anatomy. A Simmons catheter, typically used in neurovascular interventions, was successfully employed for engagement. A floppy guidewire was advanced across the lesion, and balloon angioplasty restored flow. The patient received tirofiban for thrombus management and remained hemodynamically stable. Elective revascularization of the native LAD diagonal lesion was planned.

Conclusion: Post-CABG patients commonly present with acute coronary syndromes, often due to vein graft degeneration. Up to 20% of coronary angiograms involve bypass grafts, which pose technical challenges due to anatomical variations. Standard engagement catheters (Judkins, Amplatz, multipurpose) may fail in complex cases, requiring alternative approaches. The Simmons catheter, designed for neurovascular use, features a sharp curve that facilitates engagement of vessels with steep take-offs. While primarily used for cerebral, carotid, and vertebral imaging, this case demonstrates its utility in coronary interventions. Its distinct hook-like shape enabled successful graft access when conventional methods failed. This case underscores the importance of adaptability in interventional cardiology. Utilizing tools from other specialties can help overcome procedural obstacles, emphasizing the need for cross-disciplinary knowledge and innovation in managing complex vascular anatomy.

Keywords: Acute coronary syndrome, bypass graft intervention, coronary angiography, NSTEMI, saphenous vein graft, Simmons catheter

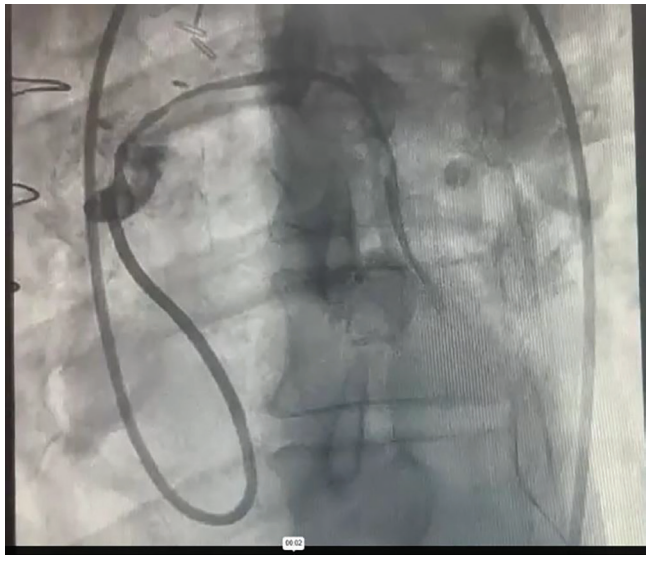

Figure 1. Saphenous osteal imaging with Simmons catheter

[OP-15]

Predictors of Coronary Flow Impairment After Drug Coated Balloon for the Treatment of Small Vessel Coronary Artery Disease-CLAIRES Study

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Aim: Since its introduction in 1977, percutaneous coronary intervention has evolved, with drug-coated balloons (DCBs) emerging as a valuable alternative to stents-especially in small-vessel disease. By delivering antiproliferative drugs without leaving a permanent implant, DCBs reduce thrombosis risk and shorten dual antiplatelet therapy duration. However, complications such as slow flow or no-reflow remain concerns, particularly in small, complex vessels.

Methods: This single-center, retrospective study examined 102 patients with 138 *de novo* small-vessel lesions (≤2.75 mm) treated with DCB angioplasty between 2020 and 2024. Exclusion criteria included in-stent restenosis and hemodynamic instability. Following European guidelines, lesions were pre-dilated and treated with paclitaxel (PCB) or sirolimus-coated balloons (SCB). Post-procedural coronary flow was assessed using a Thrombolysis In Myocardial Infarction grading.

Results: Among 89 patients included in the final analysis, 20 experienced suboptimal flow. Groups were similar in baseline characteristics except for a higher smoking rate in the suboptimal flow group. Procedural differences included higher incidence of interventions in obtuse marginalis/ramus intermedius, tortuous, distal, or complex lesions and use of SCB. Suboptimal flow was also linked to higher DCB/RVD ratios, increased inflation pressures, and shorter inflation times. Multivariable analysis identified vessel tortuosity as the strongest predictor of suboptimal flow, followed by procedural factors and anatomical complexity.

Conclusion: Our study shows that despite the benefits of DCBs in small vessel disease, certain factors strongly predict suboptimal coronary flow. Vessel tortuosity was the most significant independent predictor, alongside procedural factors such as SCB usage, higher inflation pressure, shorter inflation time, and balloon oversizing. Anatomical features-like obtuse marginal/ramus involvement, distal lesions, and complex morphology-also raised risk. These results underscore the need for careful technique, especially in tortuous or complex vessels, to optimize outcomes with DCB therapy.

Keywords: Angioplasty, coronary slow flow, drug coated balloon, noreflow phenomenon

Table 1. Patients demographics, characteristics and procedural parameters

	<TIMI-3 flow(n:20)	TIMI-3 flow(n:69)	p
Mean age,years	67.4±11.5	66.8±12.1	.249
Male,n (%)	15(75)	53(76.8)	.184
Dyslipidemia, n (%)	14(70)	49(71.1)	.433
Hypertension, n(%)	17(85)	58(84.1)	.106
Diabetes mellitus, n (%)	8(40)	29(42.1)	.527
Current smoker,n(%)	13(65)	34(49.2)	**<0.001**
Previous myocardial infarction, n(%)	5(25)	15(21.7)	.079
Previous PCI, n (%)	7(35)	23(33.3)	.094
Previous CABG,n(%)	1(5)	3(4.3)	.125
Prior CVA,n(%)	1(5)	0	
PAD,n(%)	2(10)	6(8.7)	.219
COPD,n(%)	2(10)	6(8.7)	.187
CKD,n(%)	3(15)	9(13.1)	.085
LVEF,%	59.4±10.3	59.8±10.6	.536
Multivessel disease, n(%)			**<0.001**
1-vessel disease	7(35)	25(36.2)	
2-vessel disease	8(40)	29(42.1)	
3-vessel disease	5(25)	15(21.7)	
Body Mass Index, kg/m2	26.2±2.0	26.0±1.9	.103
Fasting plasma glucose, mg/dL	117(93-162)	104(90-152)	.144
Creatinine, mg/dL	0.8(0.7-1.1)	0.8(0.7-1.1)	.293
Uric acid, mg/dL	5.3±1.4	5.2±1.3	.086
Total cholesterol, mg/dL	180(129-214)	176 (130-210)	.239
Triglycerides, mg/dL	151 (94-206)	148(92-201)	.368
HDL-C, mg/dL	33(29-42)	35(30-50)	.630
LDL-C, mg/dL	116 (87-149)	111 (84-143))	.513
CRP, mg/dL	0.65 (0.20-1.12)	0.64 (0.17-1.31)	.155
e-GFR, mL/min	89.2 ± 17.6	89.6 ± 17.1	.461
WBC, (x1000/mm3)	10.6 ± 3.2	10.2 ± 3.1	.177
Lymphocyte, (x1000/mm3)	1.91 ± 0.54	1.87 ± 0.51	.409
Monocyte, (x1000/mm3)	0.62 ± 0.30	0.61 ± 0.28	.224
Neutrophil, (x1000/mm3)	7.45 ± 2.91	7.37 ± 2.89	.395
Hemoglobin, g/dL	13.5 ± 2.0	13.3 ± 2.1	.679
Platelet count, (x1000/mm3)	263 (220-318)	258 (220-315)	.313
SBP, (mmHg)	132.5 ± 18.4	133.8 ± 17.1	.096
DBP, (mmHg)	76.4 ± 13.6	76.9 ± 13.1	.473
Heart rate, beats/min	84 ± 12	84 ± 11	.337
Target vessel			**<0.01**
Left anterior descending coronary artery, n (%)	3(15)	14(20.3)	
Diagonal branch,n (%)	2(10)	12(17.4)	
Left circumflex coronary artery, n (%)	2(10)	11(15.9)	
Obtuse marginal branch/ramus, n (%)	7(35)	14(20.3)	
Right coronary artery,n(%)	2(10)	10(14.5)	
Posterior descending artery/Posterolateral artery, n (%)	4(20)	8(11.6)	
ACC/AHA lesion classification			**<0.01**
A-B1, n (%)	4(20)	19(27.5)	
B2, n (%)	6(30)	28(40.6)	
C, n (%)	10(50)	22(31.9)	
CTO, n (%)	1(5)	4(5.8)	.085
Bifurcation with full DCB, n (%)	2(10)	7(10.1)	
Bifurcation with hybrid approach, n (%)	0	12(17.4)	
Distal disease, n (%)	9(45)	19(27.5)	**<0.01**
Tortuosity, n (%)	13(65)	14(20.3)	**<0.01**
Moderate or severe calcification, n (%)	3(15)	12(17.4)	.130
Transradial approach, n (%)	19(95)	69(100)	.738
RVD QCA	2.4± 0.2	2.4± 0.3	.235
Predilatation modalities			
SC balloon, n (%)	7(35)	24(34.8)	.336
NC balloon, n (%)	6(30)	22(31.9)	.294
Score balloon, n (%)	5(25)	18(26.1)	.162
Rotational atherectomy, n (%)	2(10)	5(7.2)	.071
Types of DCB's			**<0.01**
PCB	7(35)	37(53.7)	
SCB	13(65)	32(46.3)	
Mean DCB diameter,mm	2.4± 0.3	2.3± 0.3	.103
DCB length, mm	20±5	21±5	.391
DCB/RVD ratio	1.04±0.13	0.94±0.10	**<0.01**
DCB inflation pressure, atm	11.6±3.1	9.2±3.4	**<0.01**
DCB inflation duration, seconds	45.9±17.6	61.5±17.4	**<0.01**

Table 2. The predictors of the <TIMI-3 flow after DCB

	Adjusted OR(95%CI)	p
Current smoker	1.69 (1.14–4.51)	**<0.01**
Three-vessel disease	2.08(1.76-5.11)	**<0.01**
Type C ACC/AHA lesion	1.90(1.32-3.94)	**<0.01**
Obtuse marginalis branch/ramus	4.21(3.69-10.28)	**<0.01**
Tortuosity	6.13(4.04-19.35)	**<0.01**
Distal disease	3.46(1.81-6.22)	**<0.01**
SCB	4.43(3.26-8.29)	**<0.01**
DCB/RVD ratio	3.85(3.61-4.95)	**<0.01**
DCB inflation pressure	5.47(3.13-10.14)	**<0.01**
DCB inflation duration	4.89(3.13-9.51)	**<0.01**

[OP-16]

BTK CTO, the Power of Multi Technique Usage

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Seventy years old male patient, admitted to our diabetic foot care clinic due to nonhealing ulcer, focal gangrene at the upper surface of the right foot. The patient went on insulin and antidiabetic medication for 8 years, hypertensive and grade 3 chronic kidney disease. The Doppler ultrasonography revealed no flow starting from the proximal part of the ATA trace. DSA views obtained from peripheral angiography showed chronic total occlusion of the ATA and multiple severe stenosis of the peroneal artery also without remarkable flow of the distal part of the ATA and the pedal arch also. After engagment of the microcatheter at the proximal cap of the lesion we performed HDR technique by injecting 0.5 cc opaque substance, but unfortunately we were not be able to cross antegradely after that. Here we decided to switch to the retrograde approch. 0.018 v-18 boston wire through the lateral planter artery to reach the distal part of the anterior tibial artery then up forward to the proximal cap of the lesion, and there it was very easy to cross it without any resistance and be safe in the poplital artery then using the retrograde wire just as marker to advance the antegrade wire at the same line and then be in the distal tru lumen and confering it by TI injection. Multiple balloon inflation and finally full revascularization of the anterior tibial artery. In this case we thought that HDR at the proximal cap segment made some of the canals available to be crossed by the retrograde wire, so the failure of one technique dose not mean it did not work. They might be collective to each other. From this case we suggest that HDR can be an effective technique in such heavily calcific long chrronic total occlusions.

Keywords: BTK CTO, HDR, retrograde approach

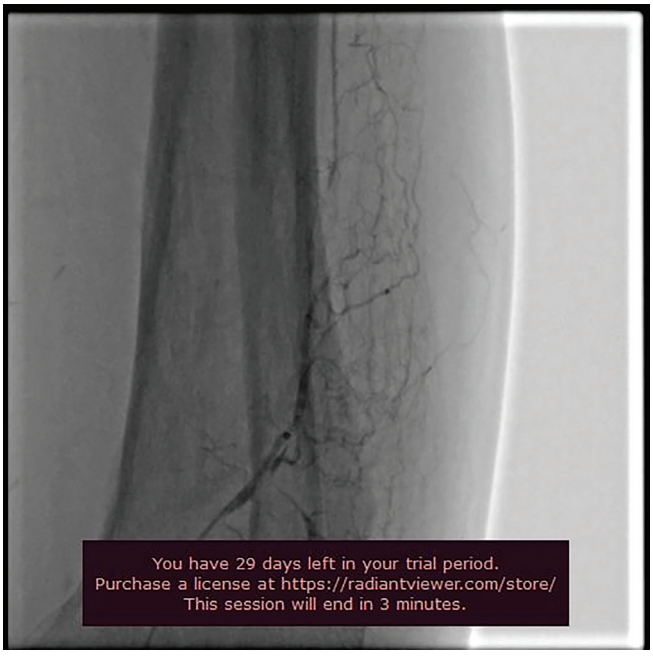

Figure 1. HDR

Figure 2. Retrograde cross

[OP-17]

Successful Bifurcation Stenting of LAD-D1 Following Diagonal Dissection During LAD PCI Performed via Radial Artery Access and Continuation of the Procedure via Femoral Artery Access

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Aim: The patient, with a history of coronary artery disease for 10 years and hypertension for 10 years, was referred for coronary angiography due to positive findings on an exercise stress test.

Case Report: Coronary angiography report: Left main coronary artery: Normal left anterior descending coronary artery (LAD): Proximal 70% stenosis, proximal D1 with plaque, mid 80-90% stenosis CX: Ostial 20-30%, proximal stent patent right coronary artery: Proximal 30-40% stenosis, distal with plaque Decision: Percutaneous coronary intervention (PCI) for mid LAD and D1 lesions. After appropriate premedication, the lesions in LAD and D1 were crossed using floppy guidewires. Predilatation of the mid D1 lesion was performed with a 2.5x12 mm NC balloon. Subsequently, a 2.5x19 mm DES stent was implanted at nominal pressure. Post-stent imaging revealed dissection in the proximal diagonal artery. Following this finding, the procedure, initially performed via radial access, was continued via femoral access. A 2.75x24 mm DES stent was implanted in the diagonal artery, and a 3.0x32 mm DES stent was implanted in the LAD using the mini-Culotte technique. Kissing balloon dilatation was performed with 2.75x24 mm and 3.25x8 mm balloons in the diagonal and LAD, respectively. A final POT was performed with a 3.25x8 mm balloon. Full vessel patency and a Thrombolysis In Myocardial Infarction 3 flow were achieved without complications.

Conclusion: Successful bifurcation stenting of LAD and diagonal artery. In our clinic, almost all coronary angiography cases, including primary PCI, are performed via radial access. The aim of sharing this case is to emphasize that in patients with lesions potentially requiring bifurcation intervention after initial imaging, elective femoral access can be planned if no emergency condition exists. Moreover, in the event of a complication during the procedure, as in our case, the procedure can be urgently transitioned to femoral access without leaving the patient in an elective status, allowing the continuation and successful completion of the procedure.

Keywords: Bifurcation, intervention area, dissection

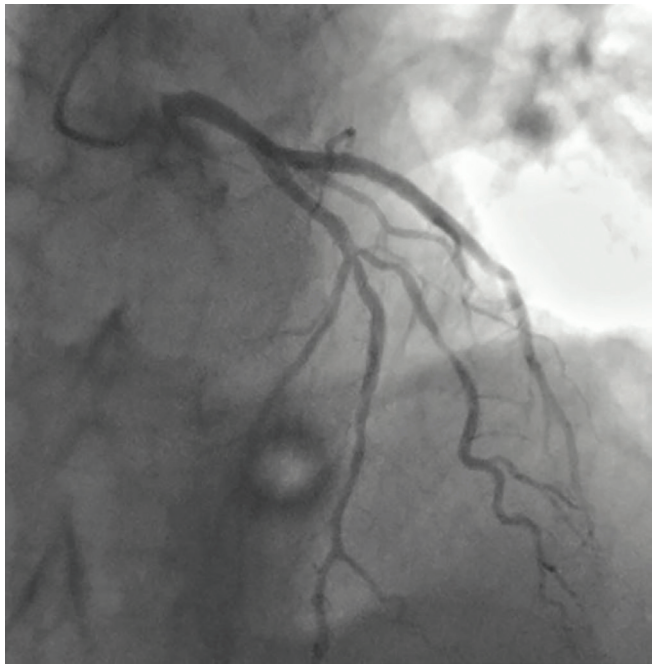

Figure 1. First image

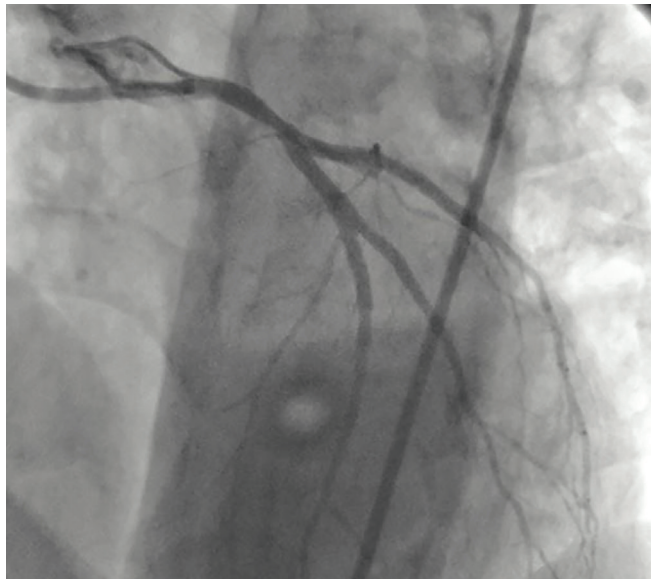

Figure 2. Last image

[OP-18]

Transcatheter Aortic Valve Implantation in Dextrocardia

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Aim: Transcatheter aortic valve replacement is a valid treatment option for severe symptomatic aortic stenosis. Dextrocardia is a rare cardiac pathology. In this case, we will discuss self-expandable valve implantation in a patient with dextrocardia.

Case Report: A 70-year-old male patient presented with severe aortic valve stenosis. On arrival, his blood pressure was 130/70 mmHg and heart rate was 88 beats/minute. He also had coronary artery disease, chronic systolic heart failure, chronic obstructive pulmonary disease, diabetes mellitus, and hyperlipidemia. Echocardiography showed 40-45% ejection fraction, severe aortic valve stenosis with a mean gradient of 50 mmHg, an aortic valve area of 0.6 cm^2, and mild mitral regurgitation. He was receiving appropriate medical treatment. The right femoral artery was evaluated as calcified and tortuous. The procedure was performed under local anesthesia. The patient was taken to the left transfemoral method. Right ventricular pacing was applied. Since the annulus was heavily calcified, pre-dilation was performed with a 23 mm balloon. Then, a 27 mm Portico valve was implanted. No complications were observed.

Conclusion: Dextrocardia is a very rare congenital heart disease seen in approximately 1 in 12,000 live births. Only a few TAVI cases have been reported in patients with dextrocardia. Approximately 30% of these were implanted with self-expandable aortic valve prosthesis (CoreValve) and the others with balloon expandable devices (SAPIEN XT). This case is the first known case of Portico valve.

Keywords: TAVI, dextrocardia, Portico

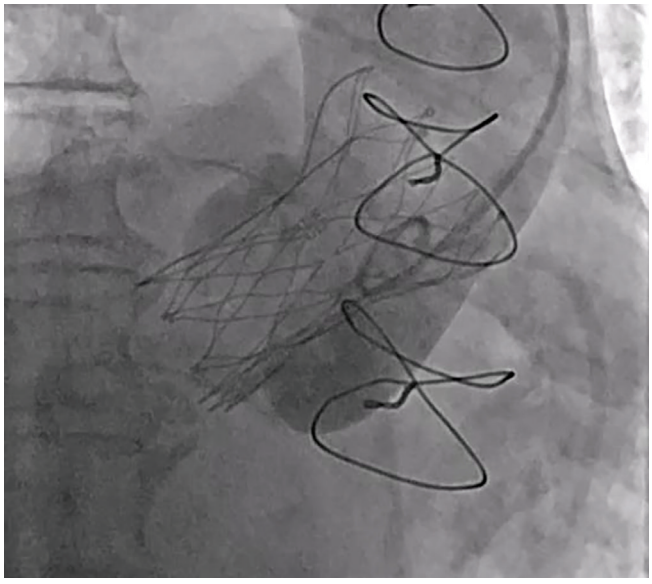

Figure 1. TAVI Portico implantation

Figure 2. TAVI pre dilatasyon