OrbusNeich Supported PEP:
Peripheral Endovascular Intervention Workshop in Ho Chi Minh, Vietnam

Dear Colleagues,

A successful Physician Exchange Program (PEP), hosted by our Vietnam distributor partner (PT Medical) established good collaboration with the Department of Cardiac Thoracic Vascular Surgery (CTVS) at Thong Nhat hospital that took place on 23rd – 24th March 2023.

The objective of the workshop entitled **"Peripheral Arterial Disease Treatments"** aimed to support and provide opportunities for Health Care Professionals who have keen interest in Endovascular Intervention pertaining to Peripheral Arterial Disease (PAD) / Hemodialysis Access Management (HAM).

Zoom broadcast / Live Facebook video was organised and attended by at least 70 participants ranging from Interventional Cardiologist and Interventional Radiologist.

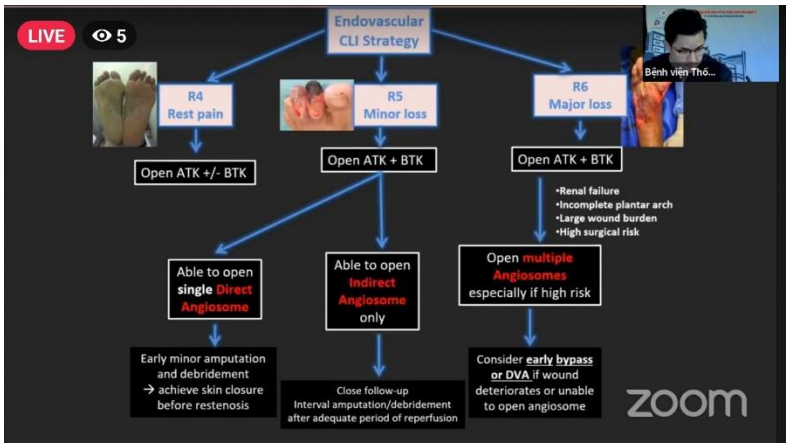
The facilitating team consisted of distinguished panellists:

Chairperson: Assoc. Prof Le Dinh Thanh, Director of Thong Nhat Hospital
Panelist: Assoc. Prof Ho Thuong Dung, President of Vietnam Association of Interventional Cardiology
Panelist: Prof. Tran Quyet Tien, Vice Director of Cho Ray Hospital
Speaker: Dr. Darryl Lim, Head of Department, Director of Vascular Service of Changi General Hospital
Speaker: Dr. Nguyen Duy Tan, Head of Department of Cardiac Thoracic Vascular Surgery, Thong Nhat Hospital
Speaker: Dr. Nguyen Bach, Head of Department of Nephrology, Thong Nhat Hospital

Dr. Darryl Lim started the session with a lecture entitled **"Treatment Strategies and Multidisciplinary Approach to BTK/BTA Intervention in CLTI**". An overview of Diabetes rate in Singapore was presented and shared some of the challenges when dealing with Critical Limb Ischemia (CLI). Key highlights focused on several topics.

1. Revascularization Strategy Concepts, illustrated with real case examples on the use of non-compliant balloon approach
2. Factors to consider when choosing the right target vessel to treat
3. Advantages of JADE non-compliant balloon for BTK/BTA intervention to tackle the problem with CLI (i.e. Recoil / Dissection / Restenosis / Severely calcified)
4. Advantage of Focused Force Angioplasty concept that may be useful for resistant lesions where high pressure balloon may not be able to efface well
5. Sharing of innovative techniques to overcome adversities during BTK/BTA intervention

Dr. Nguyen Duy Tan gave a summary of the selected PTA cases and Dr. Nguyen Bach presented the selected cases during patients' assessment. The case review discussions helped in analysing the appropriate treatment strategies prior to the live cases demonstration.



Workshop Day 1:

One PTA lower limb case and three AVF cases were planned.

PTA Case 1: Femoropopliteal Disease, Rutherford Classification Stage 4 (rest pain), Stenosis 70-80% at Right Superficial Femoral Artery (SFA).

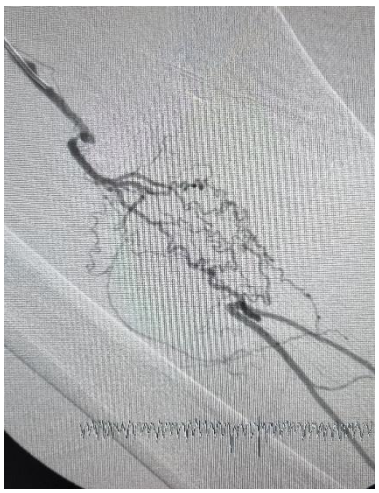
Treatment Strategy: To treat femoropopliteal calcified lesion. Crossover approach with 6F Sheath and Diagnostic Catheter was used to bring down 0.018" guidewire to target vessel. Attempted antegrade approach but unsuccessful to transverse wire across the tight occlusion. Hence, proceeded with early retrograde puncture (SAFARI technique) at Popliteal Artery site.

Retrograde attempt was successful to bring the wire through and through across the lumen of the target vessel. 0.014” guidewire was exchanged to facilitate the use of JADE Rx platform.

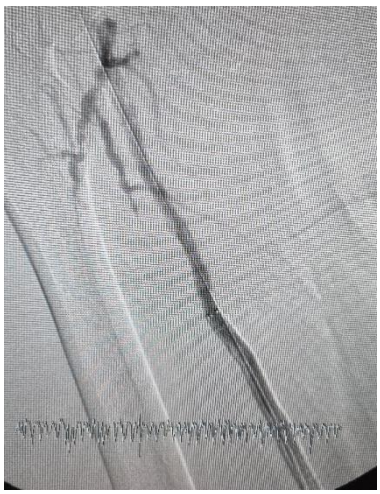
Intervention: Pre-dilatation with JADE 3mm x 80mm was necessary to create a small channel. Plain Old Balloon Angioplasty (POBA) was performed with JADE 4mm x 180mm and 5mm x 180mm. Post-angioplasty angiogram revealed slight recoil at mid SFA and subsequently post-dilated with JADE 5.5mm x 80mm. To prevent reocclusion at the calcified lesion, decision was to provide a mechanical scaffold with a Drug Eluting Stent (DES). Completion Angiogram demonstrated brisk flow from femoropopliteal vessel to tibial vessel.




Pre-Angiogram



Post-Angiogram



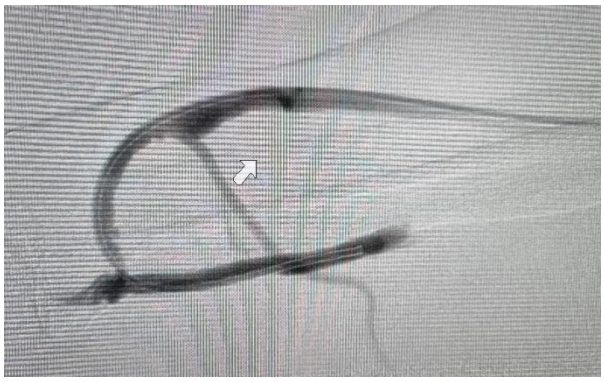

AVF Case 2, 3, 4: All cases were ESRF underwent Radio Cephalic AV Fistula (RC AVF) creation back in year 2022 but all cases failed to mature (FTM). Failure of venous fistula to mature could be due to several reasons such as small or stenosed arterial inflow, AV anastomosis stenosis, juxta-anastomotic segment stenosis or general poor quality of the vein.

Treatment Strategy: High pressure balloon angioplasty for the stenotic lesions help to facilitate maturation of the fistula. The size of the angioplasty balloon has to be chosen based on the adjacent relatively normal venous fistula, usually 4mm – 6mm. Ultrasound was used to identify the stenosis over the AV anastomosis.

Intervention: Angioplasty of the radiocephalic anastomosis and juxta-anastomotic region were performed using JADE high pressure non-compliant balloon for all three cases. Thrill of the RC AVF for all three cases have improved after intervention.

Pre-Angiogram

Post-Angiogram



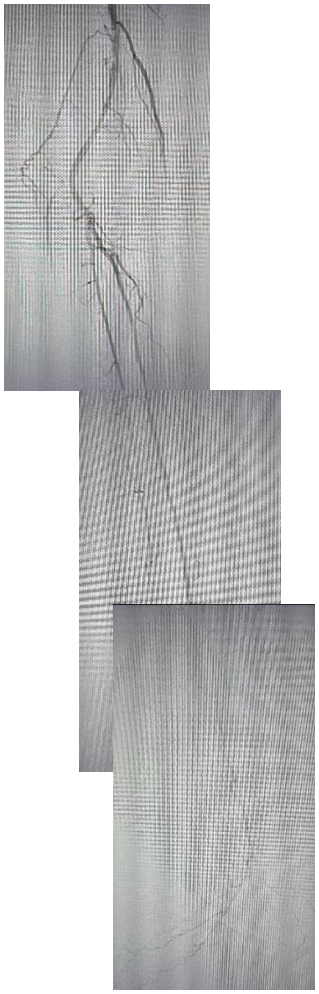
Workshop Day 2:

PTA Case 5: Femoropopliteal Disease, Rutherford Classification Stage 4 (rest pain), Stenosis 70-80% at Right Popliteal Artery.

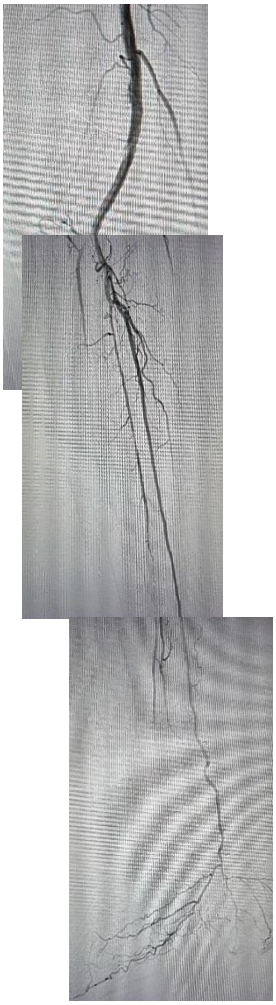
Treatment Strategy: Target vessel to treat Popliteal Artery stenosis. Antegrade approach and Diagnostic Catheter was used to bring down 0.018" guidewire to target vessel. 0.014" guidewire was exchanged to facilitate the use of JADE Rx platform.

Intervention: Angioplasty with JADE 4mm x 80mm was performed followed by Drug Coated Balloon 5mm x 120mm. Post-angioplasty angiogram revealed minimum dissection and subsequently prolong dilatation with JADE 5.0mm x 120mm. In addition, Angioplasty was also performed at Posterior Tibial Artery (PTA) with JADE 2.5mm x 180mm. Completion Angiogram demonstrated brisk flow from femoropopliteal vessel to tibial vessel to lateral plantar arch with much improved blood flow to the foot.

Pre-Angiogram



Post-Angiogram



Conclusion:

Both Dr. Nguyen Duy Tan and Dr. Bach were satisfied with the good collaboration with Dr. Darryl Lim and appreciative for his expertise and advice on both Peripheral Arterial Disease and Hemodialysis Access Management to CTVS team in Thong Nhat Hospital. They look forward to more collaboration with Dr. Darryl Lim.