Stenting with Complete SE 8x100 mm, 10x60 mm, 10x 60 mm.
Final kissing at iliac bifurcations with 8 x 60 mm Fox balloons.
Case Summary:
A 45-year-old man presented with a 1-year history of left leg claudication. The walking length was limited to 100 meters. A vascular Duplex found evidence suggestive of bilateral iliac artery flow limiting lesions. Angiography found total occlusion of left common iliac artery. The procedure was performed with bilateral femoral punctures with multiple attempts to recanalize the iliac occlusion. The recanalization process was nearly abandoned due to difficulty in reentry to the true lumen. The Outback catheter was not available at the time of the procedure. A JR4 catheter tip was shortened by scissors. Then a coronary CTO wire was used while the JR4 with shortened tip aiming at the correct direction for penetration. The re-entry process was successful with reverse CART technique. The procedure was then completed with self-expandable stents to iliac bifurcations.

TCTAP C-191

Targeted Adjustable Pharmaceutical Application System (TAPAS) Catheter Assisted Thrombolysis in Cirrhotic Patient Contraindicated for Thrombolysis

Chung-Ho Hsu
China Medical University Hospital, Taiwan

[Clinical Information]
Patient initials or identifier number:
Ho Chen Swei Tao
Relevant clinical history and physical exam:
This 82 year old lady with a history of liver cirrhosis, HBV related, Child C was admitted due to right leg edema. Physical examination disclosed unilateral right leg edema.
Relevant test results prior to catheterization:
D-dimer was positive and vascular ultrasound disclosed thrombotic occlusion of right femoral vein.
Relevant catheterization findings:
Angiography disclosed thrombus with total occlusion over right femoral vein.
[Interventional Management]
Procedural step:
A 7 Fr sheath was inserted to left femoral vein and G2X retrievable IVC filter was implanted below renal vein and above iliac vein bifurcation. A 8 Fr Cook crossover sheath was advanced from left common femoral vein to right common femoral vein (RCFV). Targeted Adjustable Pharmaceutical Application System (TAPAS) balloon infusion catheter was inserted under assistance of a .014" PT2 300 cm wire. Thrombus over RCFV and proximal femoral vein was identified and isolated by two balloons inside TAPAS catheter. Heparin 3000 units, urokinase 480000 units were given for localized thrombolysis within TAPAS catheter. After drug retension for 20 minutes, drug was removed. The residual thrombus was dilated with a 8.0/40 mm Admiral balloon at 6 atm, 12.0/40 mm Admiral balloon at 6 atm for fragmentation. A 8 Fr JR4 guiding catheter and RESS guiding catheter was used for thrombectomy. Mild residual thrombus was noted with adequate angiographic result and TIMI-3 flow achieved.
Case Summary:
This 82 year old lady with a history of liver cirrhosis, HBV related, Child C was admitted due to right leg edema for weeks and deep vein thrombosis was noted with much thrombus found over right femoral vein. Due to contra-indication for systemic thrombolysis, and also risky for catheter-directed thrombolysis (CDT), we use TAPAS catheter assisted thrombolysis to minimize bleeding complication. TAPAS catheter was successfully used with heparin 3000 units, urokinase 480000 units used. These drug was removed from body after local thrombolysis assisted by TAPAS catheter for 20 minutes. Successful PTA/catheter assisted thrombectomy was performed. Right leg edema improved in one day and no anticoagulation therapy was given after the index procedure without recurrence of DVT.

TCTAP C-192

A Successful Endovascular Stent Graft Treatment Case in Common Femoral Artery Rupture Induced During Femoral Catheterization

Li Hu, Seung-Woon Rha
Korea University Guro Hospital, Korea (Republic of)

[Clinical Information]
Patient initials or identifier number:
CPZ
Relevant clinical history and physical exam:
A 69 years old female, symptomatic for resting leg pain and non-healing ulcers on the great toe of the right foot, was referred to our division for peripheral arteriography and potential percutaneous endovascular revascularization. Comorbidities included diabetes mellitus and chronic renal failure on hemodialysis since 26years ago.
Relevant test results prior to catheterization:
Right antegrade common femoral artery puncture was performed using a 19 G needle, and favour wiring into the superficial femoral artery. A 5F sheath was then inserted and diagnostic angiography was done. After BTK angiogram, huge hematoma was noted in right ipsilateral puncture site. Emergent subtraction angiogram showed diffuse severe calcification of entire femoral arteries and a huge rupture with significant extravasation in common femoral artery puncture site. Treatment with graft stent was decided to close the rupture site by endovascular intervention and to prevent hemodynamic collapse immediately.
Relevant catheterization findings:
Initially manual compression was applied to the bleeding site during contralateral vascular access for stentgraft implantation with massive hydration and inotropic support. Left femoral 5F introducer sheath was exchanged for a 45cm, 8F Balkin sheath cross the iliac bifurcation. A 0.035-inch hydrophilic guidewire was inserted into the Rt SFA, during graft stent preparation, ballooning tamponade was done using Admiral (5.0x40mm) and Foxross balloon (7.0x60mm) in CFA. After we placed a nitinol-polytetraflu-oroethylene S&G stent-graft (10.0x60mm) at CFA, slight extravasation through leak into the outside of the stent-graft at the distal end of the stent-graft was noted. An additional S&G graftstent (8.0x60mm) was deployed from distal segment of previous stentgraft to prox SFA. After adjuvant ballooning to the stentgraft implantation site, final subtraction angiogram showed no evidence of visible extravasation or endoleak.
[Interventional Management]
Procedural step:
Right antegrade common femoral artery puncture was performed using a 19 G needle, and favour wiring into the superficial femoral artery. A 5F sheath was then inserted and diagnostic angiography was done. After BTK angiogram, huge hematoma was noted in right ipsilateral puncture site. Emergent subtraction angiogram showed diffuse severe calcification of entire femoral arteries and a huge rupture with significant extravasation in common femoral artery puncture site. Treatment with graft stent was decided to close the rupture site by endovascular intervention and to prevent hemodynamic collapse immediately.
Case Summary:
The patient's condition was then monitored in the intensive care unit for 24 hours, during which time her lost blood was restored by transfusion and her vital signs became stable. On the 3th postoperative day, the patient was discharged from the hospital in good condition.

TCTAP C-193

Successful Stenting of a Native SFA After Failed Femoropopliteal Bypass Grafting

Yap Hui Yi
Chi Mei Hospital, Liouying Branch, Taiwan

[Clinical Information]
Patient initials or identifier number:
patient identifier no: 16978296, patient name: Wang Tao Shun
Relevant clinical history and physical exam:
A 75 years old male patient has the risk factors of diabetes, hypertension and dyslipidemia for many years. He had bilateral SFA occlusion and underwent bypass surgery 10 years ago. He had left foot chronic ulcer wound with resting pain for 3 weeks. Under the diagnosed of CLI, he admitted for further evaluation and treatment.
Relevant test results prior to catheterization:
ABI: left leg 0.5; right leg 0.8
Relevant catheterization findings:
The left limbs angiography showed, vein-graft bypass from SFA to peroneal artery. However, stenosis at the SFA anastomosis & total occlusion at distal graft. The ATA showed moderate stenosis at proximal portion.
[Interventional Management]
Procedural step:
After right fenoral artery puncture, 6Fr KSAW-RB-ANL2-HC guiding sheawas inserted, and crossed over to left common femoral artery. We crossed the occlusion lesion with .018 V18 wire. Dilated the total occlusion part Pacific Xtreme balloon 4.0x120mm, inflated to 8atm. Two Zilver Flex stent 6.0/200mm and another 6.0/170mm stent was successfully deployed. Adjunctive ballooning using Pacific Xtreme balloon 4.0x120mm was performed. Good patency was achieved in left SFA. Exchanged the wire to 014 CTO-18 (300cm). The Anterior tibial artery lesion was dilated by Amphirion balloon 2.5x40mm, inflated to 10atm for 2 min with adequate patenc after angioplasty.
Case Summary:
This 75 years old male patient admitted due to left foot chronic ulcer wound with resting pain for 3 weeks. The angiography showed vein-graft bypass from SFA to peroneal artery with stenosis at the SFA anastomosis & total occlusion at distal graf. Another moderate stenosis at ATA. Angioplasty was done using 6Fr KSAW-RB-ANL2-HC guiding sheawas inserted, and crossed over to left common femoral artery. We crossed the occlusion lesion with .018 V18 wire. Dilated the total occlusion part Pacific Xtreme balloon 4.0x120mm, inflated to 8atm. Two Zilver Flex stent 6.0/200mm and another 6.0/170mm stent was successfully deployed. Adjunctive ballooning using Pacific Xtreme balloon 4.0x120mm was performed. Exchanged the wire to 014 CTO-18 (300cm). The Anterior tibial artery lesion was dilated by Amphirion balloon 2.5x40mm, inflated to 10atm for 2 min with adequate patency at SFA and ATA after angioplasty.

TCTAP C-194

Endovascular Intervention Guided by Intravascular Ultrasound in Patient with Subclavian Artery Occlusion

Seong Hyeop Hyeon, Sang Wook Kim
Heart Center, Chung-Ang University Hospital, Korea (Republic of)

[Clinical Information]
Patient initials or identifier number:
KEY, 00949970

Relevant clinical history and physical exam:
A 64 year-old female was admitted for adequate glycemic control and evaluation of diabetic complication. She was diagnosed with diabetes 19 years ago and has received insulin therapy. Her comorbidities include hypertension and dyslipidemia. She complained of dizziness and intermittent tingling sensation of left arm. Blood pressure of left arm (80/40 mmHg) was lower than that of right arm (120/70 mmHg). Left radial pulsation was weaker than right radial one.
Relevant test results prior to catheterization:
On carotid ultrasonography, systolic reversal flow was observed in left vertebral artery. Left subclavian artery occlusion was suspected and neck CT angiography was performed. Neck CT angiography showed total occlusion of proximal left subclavian artery.
Relevant catheterization findings:
Left subclavian angiography showed total occlusion of proximal left subclavian artery.
[Interventional Management]
Procedural step:
A 7F JR 4.0 guiding catheter was advanced to aortic arch through 7F sheath placed in right femoral artery. But it was not engaged to left subclavian artery. A 7F MPA-1 guiding catheter was engaged to left subclavian artery. However, the Radifocus 0.035" guidewire could not pass the occluded lesion. A 5F Heartrail catheter was inserted to guiding catheter for back-up support. But the Radifocus 0.035" guidewire still could not cross the lesion. Left radial artery approach was tried. A 5F JR 4.0 diagnostic catheter was inserted to left subclavian artery through 5F radial sheath. The Radifocus 0.035" guidewire could pass the lesion from left subclavian artery to aortic arch. A snare catheter was inserted through right femoral artery. The Radifocus 0.035" guidewire grasped by the snare was pulled outside right femoral sheath. The 7F right femoral sheath was changed to 8F sheath. An 8F IG catheter was inserted. IVUS was checked. Reference diameter and lesion length were measured (7.4mm x 29mm). Powerflex Pro 4mm x 40mm balloon was inflated. Palmaz Genesis 7mm x 29mm stent was implanted. Post-stent IVUS was performed.
Case Summary:
IVUS can be a useful tool in determining device size in endovascular intervention of occluded subclavianartery as well as in percutaneous coronary intervention.

TCTAP C-195

Stenting of Aortoiliac Occlusive Disease

MD Forhad Jamal
National Heart Foundation & RI, Bangladesh

[Clinical Information]
Patient initials or identifier number:
55 Yrs, male patient
Relevant clinical history and physical exam:
Hypertensive, Diabetic, Dyslipidaemic and Smoker. Presented with intermittent claudication pain with weakness of both lower limb (Left> Right). Femoral pulse volume was diminished (Left> Right) with non palpable ADP on left side.
Relevant test results prior to catheterization:
Haemoglobin-13 gm/dl, HBA1C-8.8, Creatinine-1.0 mg/dl.
Relevant catheterization findings:
Peripheral angiogram revealed 70% stenosis of infra-renal abdominal aorta. There was eccentric plaque with 95% stenosis of abdominal aorta just above bifurcation to CIA. Non critical osteal lesions were observed in both CIA.
[Interventional Management]
Procedural step:
Bilateral femoral access was established with 7 FR sheath. Lesion was crossed with Terumo regular hydrophilic wire from both sides. One 10 mm X 60 mm balloon expandable stent was placed across the lesion from infra renal abdominal