Relevant Test Results Prior to Catheterization. Exam:
ECG: sinus rhythm with paroxysmal atrial fibrillation.
CXR: cardiomegaly, no pulmonary congestion.
Lab data: persisted anemia.
2-D echo: enlarged LA, RA and RV, Concentric LVH, MR: 2-3+, AR and TR: 1-2+, trans TV PSPG: 46/23 mmHg, LVEF: 60%.
PE:
pulsation: left popliteal artery: -, anterior tibia artery: -, posterior tibia artery: -
Ulceration wound at territory of left posterior tibia artery
ABI: left/right: 0.56/0.74

Relevant Catheterization Findings. Angiography Summary of left lower limb:
SFA: ostium 50% stenosis, middle to distal 75%-80% diffuse stenosis
Popliteal artery to tibiofibular trunk: long CTO.
ATA: supplied via collaterals, distal 70% discrete stenosis.
Peroneal artery: CTO, distal peroneal artery was reconstructed via collaterals
PTA: long CTO, no obvious collaterals.
Distal Plantar artery: very faint island, collaterals form branch of distal peroneal artery.
CTO of left popliteal a. and TP trunk was opened during first time PTA.

INTERVENTIONAL MANAGEMENT

Procedural Step. The CTO lesion of TP trunk was opened during the first time PTA but posterior tibia artery was still occluded. Due to worse wound condition, deep venous arterialization was planned for improving blood supply of territory of posterior tibia artery.
2nd time PTA for deep-venous arterialization:
Echo-guided puncture of left posterior tibia vein was done then posterior tibia vein was wired with a Command ES wire. TP trunk and posterior tibia artery were approached from left common femoral artery antegradely and false lumen of PTA was wired with a Treasure 12 wire. Passeo 5.0 mm x 4 cm balloon catheter was inflated at proximal PTV and we checked puncture site by arterial angiography. Puncture of PTV from TP trunk by an Outback device was done smoothly then the Command ES can go to distal PTV from TP trunk after manipulation. The whole PTV was dilated with a Passeo 4.0 mm x 8 cm balloon catheter to destroy the valves. TP trunk to middle PTV was scaffolded with Viabahn 5 mm x 15 cm to create an AV shunting. Post-dilatation of Viabahn and whole posterior tibia vein was done. Following angiography showed successful deep venous arterialization of posterior tibia vein with TIMI 3 flow. Stenotic lesion of left SFA was scaffolded with a 6 mm x 12 cm Zilver PTX. Good final flow. The procedure time was 5 hours 40 mins and the fluoroscopic time was 78 mins. No complication was noted.

Conclusions. 1. Deep venous arterialization is an alternative therapy for end-stage critical limb ischemia with good safety.
2. Echo-guided puncture is an effective and important technique for deep venous arterialization and complicated PTA.
3. Sometimes draining venous collaterals would “steal” the blood flow to deep venous arterialization and may need further intervention to maintain the flow.

TCTAP C-176

Endovascular Hemostasis of Recurrent Bleeding from Mandibular Aneurysmal Bone Cyst After Tooth Extraction

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CLINICAL INFORMATION

Patient Initials or Identifier Number. Pr

Relevant Clinical History and Physical Exam. 8 y.o. F admitted to Republican Pediatric Hospital 21.09 complaining of active profuse bleeding from mandibular after 4.6 tooth extraction.

Bleeding started 15.09 after 4.6 tooth extraction at a small city dentist.

18.09 readmitted to dentist. Local hemostasis attempts were unsuccessful. Patient urgently transferred to local Municipal Hospital. First endovascular embolization attempt gave only temporal result.

On the admission patient pale and diaforetic. Profuse unstoppable bleeding despite tamponade.

Relevant Test Results Prior to Catheterization. RBC 2 X 10^{12}, Hgb 60 g/l

22.10 CT: extraneous body of RT inferior alveolar artery.

Relevant Catheterization Findings. During first attempt of endovascular hemostasis in the Municipal Hospital of small city RT a. alveolaris inferior was embolized. Bleeding was persistent.

INTERVENTIONAL MANAGEMENT

Procedural Step. 6F catheter sheath introducer installed at RT femoral artery. RT carotid arteriography revealed high vascularized tumor in RT mandibular branch with blood supply from RT a. facialis. RT a. maxillaris was embolized previously in Municipal Hospital and is not visible.

Selective embolization of RT a. facialis was done. 15 minutes later - contrast stasis and reflux in arterial stump - effective embolization.

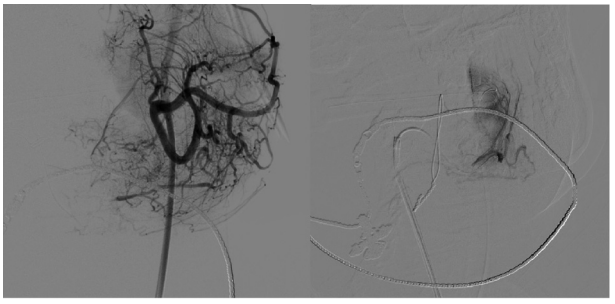
LT carotid angiography revealed hight vascularized tumor in RT mandibular branch with collateral blood supply from LT a. alveolaris inferior and LT a. facialis.

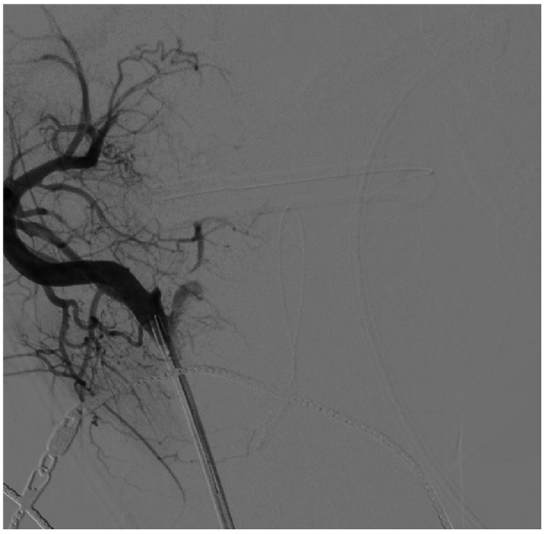
Selective embolization of LT a. alveolaris inferior and LT a. facialis. was done. 15 minutes later - contrast stasis and reflux in arterial stumps - effective embolization.

3 days after embolization, successful extirpation of RT mandibular aneurysmal bone cyst was done with negligible blood loss (10 ml).

Histology: Osteoclastoma.

Postoperational period without complications. Patient discharged from hospital 13.10.17.





Conclusions. Aneurysmal bone cyst (ABC) is a rare benign tumorlike lesion, described as blood-filled osteolytic lesion. In 1/3 of cases it develops as a complication of bone tumors.

Considering that case we made following conclusions:

1. Primary ABC extirpation was not done, because of fear of hemorrhagic shock.
2. First endovascular hemostasis was unsuccessful because of rich collateral blood supply.
3. We worried about trophy complication after embolization of all ABC blood supplying vessels.

After meticulous looking for blood supply vessels and careful they embolization we achieved total abruption of ABC blood supply.

Despite our fears wound healed by primary adhesion without any trophy complications.

TCTAP C-177

Successful Balloon Pulmonary Angioplasty After Previous Pulmonary Endarterectomy

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CLINICAL INFORMATION

Patient Initials or Identifier Number. SMT

Relevant Clinical History and Physical Exam. This 52-year-old man has the history of thalassemia status post splenectomy and has suffered from recurrent pulmonary embolism and DVT. He underwent pulmonary endarterectomy in 2014 and 2 times of EKOS insertion during 2014～2016. Residual pulmonary embolism was still noticed on warfarin. He had repeated hospitalized for exertional dyspnea and chest tightness but images showed stationary pulmonary embolism. CTEPH was suspected. Riociguat was tried but symptoms persisted.

Relevant Test Results Prior to Catheterization. Echocardiography showed dilated right atrium and right ventricle with severe pulmonary hypertension (max TRPG = 68.2 mmHg) and D-shaped LV. Chest CT revealed enlarged pulmonary artery, with stationary filling defects at the wall of bilateral pulmonary arteries.

Relevant Catheterization Findings. Right heart catheterization showed elevated MPA pressure (51 mmHg) and PVR was 8.04 Wood units. Pulmonary angiogram revealed filling defects at inferior segment of bilateral pulmonary artery. Faint blood flow of left lingular artery was noticed.

INTERVENTIONAL MANAGEMENT

Procedural Step. In first session, we engaged JR4 to left inferior PA and passed a sion wire to the left posterior basal artery. BPA was performed with a 5 * 20 mm balloon. The blood flow of left lingular artery was poor and the organized thrombi were hard, so we used ultimate