

again via antegrade contralateral femoral access. All patients with successful intervention had relief of their claudication symptoms and/or rapid healing of the limb ulcers. Restenosis occurred in 5 cases by 4 months necessitating repeat intervention with Silverhawk atherectomy (n=4) or drug coated balloon (n=1).

CONCLUSION Retrograde popliteal approach is successful in about 90% of cases of chronic SFA total occlusion interventions when antegrade crossing of the CTO from contralateral or ipsilateral femoral approach is unsuccessful.

CATEGORIES ENDOVASCULAR: Peripheral Vascular Disease and Intervention

TCT-682

Single centre experience of 260 consecutive case of retrograde recanalizations in peripheral arterial disease

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BACKGROUND Retrograde recanalizations of femoropopliteal or below the knee occlusive disease potentially increase acute technical success rates in complex cases. Little is known so far regarding safety and acute technical success rates.

METHODS Between April 2014 and June 2017 we performed a total of 265 consecutive cases of retrograde recanalizations of either femoropopliteal and/or tibial occlusive disease. Retrograde vascular access was attempted via angiographic guidance in all cases.

RESULTS Retrograde access could be achieved in all but one case. Recanalization of the occluded artery and successful adjunctive therapy could be performed in 91.7% of cases. Predictors of failure to recanalize the occlude segment were severe calcification, below the knee occlusions, and severe calcification. Procedure related in-hospital complications occurred in 3/265 patients (0.11%).

CONCLUSION Retrograde recanalizations can safely performed with high technical success and low complication rates in femoropopliteal and tibial arterial occlusive disease.

CATEGORIES ENDOVASCULAR: Peripheral Vascular Disease and Intervention

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Bivalirudin versus Heparin in Patients Undergoing Percutaneous Peripheral Interventions: A Systematic Review and Meta-analysis

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BACKGROUND Bivalirudin may be an effective anticoagulation alternative to heparin as anticoagulant agent in percutaneous peripheral interventions (PPI). We aimed to compare safety and efficacy of bivalirudin versus heparin as the procedural anticoagulant agent in patients undergoing PPI.

METHODS We conducted an electronic database search of all published data. The primary endpoint was all-cause mortality. Secondary outcomes were stroke, myocardial infarction, all-bleeding, major bleeding, minor bleeding, intracranial bleeding, blood transfusion, amputations, access site complications, and length of stay. Odds ratios (OR), difference in means (DM), and 95% confidence intervals (CI) computed using the Mantel-Haenszel method. Fixed-effect model was used; if heterogeneity (I²)>25 effects were obtained using a random model.

RESULTS Eleven studies (n=36,773 patients) were included in the analysis. There was a significant difference favoring bivalirudin over

heparin for all-cause mortality (OR 0.47, 95% CI 0.24-0.93), stroke (OR 0.73, 95% CI 0.56-0.96), all-bleeding (OR 0.59 95% CI 0.46-0.76), major bleeding (OR 0.58, 95% CI 0.41-0.80), minor bleeding (OR 0.63 95% CI 0.43-0.92), and amputations (OR 0.29, 95% CI 0.22-0.38). There was no significant difference in myocardial infarction (OR 0.72, 95% CI 0.38-1.36), intracranial bleeding (OR 0.76, 95% CI 0.20-2.03), blood transfusion (OR 0.72 95% CI 0.34-1.52), access site complication (OR 0.75, 95% CI 0.54-1.05), and length of stay (DM -0.15, 95% CI -0.86-0.56).

CONCLUSION Our meta-analysis suggests that use of bivalirudin compared to heparin for PPI is associated with lower all-cause mortality, bleeding, stroke and amputations. Further large randomized trials are needed to confirm current results.

CATEGORIES ENDOVASCULAR: Peripheral Vascular Disease and Intervention

TCT-684

Bronchial Artery Embolization: An uncommon necessity: A Single Center Experience

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BACKGROUND Bronchial artery embolization (BAE) is an emergency lifesaving procedure performed for submassive to massive hemoptysis. SE Asia has a high tuberculosis prevalence and many patients present with sub massive to massive hemoptysis. Given the inconsistent procedural success, unawareness about the procedure, lack of technical expertise and resources, the procedure is not commonly performed.

METHODS We analyzed consecutive patients that underwent BAE in our institution between January 2016 and January 2017. The patients were admitted to the Respiratory Intensive Care unit in our institution and met criteria for the procedure after a multidisciplinary consensus that included the critical care physician, respiratory specialist and the interventional physician performing the procedure. Patients were subject to the routine blood work, chest X-ray, and CT scan prior to the procedure. When possible, a bronchoscopy was performed prior to the procedure to help localize the location of hemoptysis. Procedural success was defined by successful embolization of all culprit vessels and collaterals to the area. Clinical success was defined by successful cessation of hemoptysis.

RESULTS In a 12 month period, BAE was performed in 29 patients. Average follow up was available for 6 +/- 5 months. 5F Simmons, Cobra or Judkins-Right catheters were most commonly used to engage the culprit vessels. The most common etiology for hemoptysis was Tuberculosis (65%) followed by Bronchiectasis (13.7%) and Aspergilloma (13.7%). A total of 78 vessels were embolized with a >95% procedural and clinical success. 80% (23/29) of patients were discharged home. Pertinent interventional details of the study are presented in the table.

Average vessels treated per patient	2.69
Total number of vessels treated	78
Bronchial Arteries	39
Intercostal	20
Systemic collaterals (Subclavian and non subclavian)	19
PVA Particles (300 micrometer) for embolization (Cook Medical, Bloomington, IN)	89% (70 vessels)
Microcoils for embolization (Cook Medical, Bloomington, IN)	11% (8 vessels)
Recurrence of Hemoptysis	1/29 (3.5%)
Procedure related major complication	0%

CONCLUSION In patients with submassive to massive hemoptysis, BAE is a safe and effective procedure with a very high procedural success. For best results, embolization of all vessels to the area should be aggressively performed.

CATEGORIES ENDOVASCULAR: Peripheral Vascular Disease and Intervention