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Abstract No. 258

Contralateral iliac vein occlusion after iliac vein stenting with May-Thurner syndrome

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Purpose: We aimed to evaluate the incidence, possible cause and treatment outcome of contralateral deep vein thrombosis (DVT) in patients who previously underwent venous stenting for May-Thurner syndrome (MTS).

Materials: We reviewed the data of 128 patients with DVT caused by MTS who were treated with stent placement from January 2009 to May 2016. Data were collected using reporting standard for Endovascular treatment of the lower extremity DVT of JVIR. The incidence and treatment of contralateral iliac vein occlusion were analyzed.

Results: Among 128 left iliac vein stentings, 28 patients (21.8%) received ipsilateral stents that extended into the IVC whereas the remaining 100 patients (78.2%) had stenting confined to the left iliac veins. The mean follow-up duration was 36 months (range, 1-68 months). All patients were maintained by lifelong anticoagulation after stenting, however 4 patients (3.1%) of the extended stent group developed contralateral DVT. The possible causes of DVT were venous intimal hyperplasia (VIH) in 3 cases and jailing of the venous outflow in 1 case. Three patients with presumed VIH received additional contralateral stent insertion using Y-fenestration technique while the patient with jailing was managed conservatively.

Conclusions: In spite of low incidence, contralateral DVT should be taken into consideration and VIH is a likely cause. Regarding endovascular management of MTS, the ideal location of stent should be in the center of the inferior vena cava in order to avoid caudal migration of the stent and further VIH.

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Results of endovascular management of May-Thurner syndrome in the acute, subacute, and chronic setting

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Purpose: May-Thurner Syndrome (MTS) is caused by an anatomical anomaly that leads to left iliac vein compression, which can result in acute deep venous thrombosis (DVT). When thrombosis occurs, it is often extensive, requiring catheter-directed thrombolysis and/or mechanical thrombectomy before stent placement. The aim of this study is to review the results of endovascular management of MTS in a large single-center academic institution.

Materials: After Institutional Review Board approval, data was retrospectively collected on patients with MTS between 2006 and 2016. Patient characteristics, treatment outcome,

restenosis rate, and frequency of Post Thrombotic Syndrome (PTS) after treatment were reviewed.

Results: A total of 102 patients were diagnosed with MTS. Average patient age was 48. 78 (74.5%) patients were treated with stent placement. Following the onset of symptoms, 48 patients (47.1%) were stented within 14 days (acute group), 7 (6.8%) were stented between 14-90 days (subacute group), and 21 (20.5%) were stented after 90 days (chronic group). Average follow up was 23.6 months. Delayed stent occlusion occurred in 14 cases (17.9%); 10 (20.8%) in the acute group, 0 (0%) in the subacute group and 4 (19.0%) in the chronic group. Based on available data, overall primary patency was 95.7% (68/71) at one month, 91.4% (43/47) at 6 months, 94.7% (36/38) at one year, 93.3% (14/15) at two years, and 83.3% (10/12) at 5 years. Secondary patency was 81.8% (9/11) at one month, 83.3% (5/6) at 6 months, and 66.6% (2/3) at one year. PTS was reported in 28.3% (13/46) of the acute group, 57.1% (4/7) of the subacute group, and 52.4% (11/21) of the chronic group (p = 0.09). Stent failure was associated with an increase rate of PTS in the acute group (p < 0.05), but not in the chronic group (p = 0.15).

Conclusions: Durable primary patency rates can be obtained in MTS, even in the setting of chronic thrombus. Stent failure after acute therapy can lead to increased rates of PTS, so all measures should be taken to treat early and optimize immediate technical success. Stent failure did not predict PTS rates in the chronic group. There was a trend of increasing PTS symptoms associated with delayed treatment.

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Abstract No. 260

Outcomes and clinical management of isolated below-knee DVT

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Purpose: Guidelines are lacking for isolated below-knee DVT (BKDVT); ACCP suggests anticoagulation only if symptoms are severe, otherwise surveillance is recommended. Yet clinical practice remains highly variable. We sought to characterize the natural history of BKDVT, clinical management and outcomes at a tertiary medical center.

Materials: A retrospective analysis was conducted of medical records from 2014-2016. Risk factors were assessed such as age, gender, malignancy, recent surgery, and history of DVT. Treatment decisions and outcomes were identified. Radiology reports were graded for clarity. Chi-square and logistic regression were used to correlate risk factors with outcomes and determine odds of treatment.

Results: New isolated BKDVT was identified in 102 patients. Patients were symptomatic or had previous PE or DVT in all cases. 18 were positive for PE at diagnosis (17.6%; 62.1% had chest CT). Malignancy was independently associated