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JVS ABSTRACTS

Selected Abstracts from the February 2022 Issues of the *Journal of Vascular Surgery* and the *Journal of Vascular Surgery: Venous and Lymphatic Disorders* ☆

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Follow-up after acute thrombotic events following COVID-19 infection

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Objective: COVID-19 infection results in a hypercoagulable state predisposing patients to thrombotic events. We report the 3- and 6-month follow-up of 27 patients who experienced acute arterial thrombotic events in the setting of COVID-19 infection.

Methods: Data were prospectively collected and maintained for all vascular surgery consultations in the Mount Sinai Health System from patients who presented between March 16 and May 5, 2020.

Results: Twenty-seven patients experienced arterial thrombotic events. The average length of stay was 13.3 ± 15.4 days. Fourteen patients were treated with open surgical intervention, six were treated with endovascular intervention, and seven were treated with anticoagulation only. At 3-month follow-up, 11 patients (40.7%) were deceased. Nine patients who expired did so during the initial hospital stay. The 3-month cumulative primary patency rate for all interventions was 72.2%, and the 3-month primary patency rates for open surgical and endovascular interventions were 66.7 and 83.3, respectively. There were 9 (33.3%) readmissions within 3 months. Six-month follow-up was available in 25 (92.6%) patients. At 6-month follow-up, 12 (48.0%) patients were deceased, and the cumulative primary patency rate was 61.9%. The 6-month primary patency rates of open surgical and endovascular interventions were 66.7% and 55.6%, respectively. The limb-salvage rate at both 3 and 6 months was 89.2%.

Conclusions: Patients with COVID-19 infections who experienced thrombotic events saw high complication and mortality rates with relatively low patency rates.

From the Western Vascular Society

Predictors of sac regression after fenestrated endovascular aneurysm repair

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Objective: Aneurysm sac regression after standard endovascular aortic repair is associated with improved outcomes, but similar data are limited after fenestrated endovascular aortic repair (FEVAR). We sought to evaluate sac regression after FEVAR, and identify any predictors of this favorable outcome.

Methods: Patients undergoing elective FEVAR using the commercially available Zenith Fenestrated device (ZFEN; Cook Medical, Bloomington, IN) from 2012 to 2018 at a single institution were reviewed retrospectively. The maximal aortic diameter was compared between the preoperative scan and those obtained in follow-up. Patients with of 5 mm or more sac regression were included in the regression (REG) group, with all others in the nonregression (NONREG) group. Outcomes were compared between groups using univariate analysis, and logistic regression analysis was performed to identify any predictive factors for sac regression.

Results: We included 132 patients undergoing FEVAR in the analysis. At a mean follow-up of 33.1 months, 65 patients (49.2%) had sac regression of 5 mm or more and comprised the REG group (n = 65 [49.2%]). The REG group had smaller diameter devices, and were less likely to have had concomitant chimney grafts placed ($P < .05$). The NONREG group had a higher incidence of type II endoleak (35.8% vs 12.3%; $P = .002$). Sac regression was associated with a significant mortality benefit on Kaplan-Meier analysis (log rank $P = .02$). Multivariate analysis identified adjunctive parallel grafting (odds ratio [OR], 0.01; 95% confidence interval [CI], 0.03-0.36; $P < .01$), persistent type II endoleak (OR, 0.13; 95% CI, 0.02-0.74; $P < .01$), and a greater number of target vessels (OR, 0.25; 95% CI, 0.10-0.62; $P = .002$) as independent predictors of failure to regress.

Conclusions: Sac regression after FEVAR occurred in nearly one-half of patients, but seems to be less common in patients with persistent type II endoleaks and those

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