

Article
How the First Year of the COVID-19 Pandemic Impacted Patients' Hospital Admission and Care in the Vascular Surgery Divisions of the Southern Regions of the Italian Peninsula

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Abstract: Background: To investigate the effects of the COVID-19 lockdowns on the vasculopathic population. Methods: The Divisions of Vascular Surgery of the southern Italian peninsula joined this multicenter retrospective study. Each received a 13-point questionnaire investigating the hospitalization rate of vascular patients in the first 11 months of the COVID-19 pandemic and in the preceding 11 months. Results: 27 out of 29 Centers were enrolled. April-December 2020 (7092 patients) vs. 2019 (9161 patients): post-EVAR surveillance, hospitalization for Rutherford category 3 peripheral arterial disease, and asymptomatic carotid stenosis revascularization significantly decreased (1484 (16.2%) vs. 1014 (14.3%), $p = 0.0009$; 1401 (15.29%) vs. 959 (13.52%), $p = 0.0006$; and 1558 (17.01%) vs. 934 (13.17%), $p < 0.0001$, respectively), while admissions for revascularization or major amputations for chronic limb-threatening ischemia and urgent revascularization for symptomatic carotid stenosis significantly increased (1204 (16.98%) vs. 1245 (13.59%), $p < 0.0001$; 355 (5.01%) vs. 358 (3.91%), $p = 0.0007$; and 153 (2.16%) vs. 140 (1.53%), $p = 0.0009$, respectively). Conclusions: The suspension of elective procedures during the COVID-19 pandemic caused a significant reduction in post-EVAR surveillance, and in the hospitalization of asymptomatic carotid stenosis revascularization and Rutherford 3 peripheral arterial disease. Consequentially, we observed a significant increase in admissions for urgent revascularization for symptomatic carotid stenosis, as well as for revascularization or major amputations for chronic limb-threatening ischemia.

Keywords: COVID-19; carotid stenosis; abdominal aortic aneurysm; chronic limb-threatening ischemia; amputation; deep venous thrombosis