Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Journal of Vascular Surgery — June 2020 Audiovisual Summary

Peter Gloviczki, MD

Hi, I am Peter Gloviczki from Mayo Clinic, Editor-in-Chief of the *Journal of Vascular Surgery*. The COVID-19 pandemic has affected the lives of hundreds of thousands of patients and tens of thousands of health care professionals worldwide. As we go to the press today, on April 5, 2020, more than 1.2 million people have tested positive for the virus and over 67,000 have died worldwide. In the United States, more than 321,000 people have been affected and 9132 have died. The Letter to the Editor in this June issue of the *Journal of Vascular Surgery*, "A military perspective on the vascular surgeon's response to the COVID-19 pandemic," highlights the role of vascular surgeons in this crisis.[1] Drs Rasmussen and Koelling, from the Walter Reed National Military Medical Center, provide their "military perspective" on the current pandemic and emphasize that the time to act is now! We all should use the SVS/ACS guidelines, published online, for the care of vascular patients during the COVID-19 pandemic. We must create capacity: implement policies/procedures to preserve "staff, space, and stuff." We need to benefit from international partnerships: learn from other's experiences from all around the world. We need to operate in a resource-limited environment: optimize team performance and plan ahead of time. First and foremost, protect your patients, yourself, and your family from the COVID-19 virus.

The June issue of *JVS* has many great articles and I am pleased to introduce four excellent papers. The Editors' Choice article this month is also our CME article, which is entitled "Population-based long-term outcomes of open versus endovascular aortic repair of ruptured abdominal aortic aneurysms," by Konrad Salata and co-authors from Toronto, Ontario, Canada, Riyadh, Saudi Arabia, and Boston Massachusetts.[2] This is a population-based, retrospective cohort study of all patients who underwent open or endovascular repair (EVAR) of a ruptured abdominal aortic aneurysm between 2003 and 2016 in Ontario, Canada. Results of 261 EVARs and 2431 open repairs were compared and a significant benefit was found in 30-day all-cause mortality in favor of EVAR. There were also significantly less major adverse cardiac events after EVAR and the start-up benefit of higher survival after EVAR was significant until 4.5 years after intervention but not at 5 years. There was no difference in outcomes at 5 years and the difference between EVAR and open repair was not significant at 10 years either.

Our next highlighted article, titled "Hemodynamic events during carotid stenting are associated with significant periprocedural stroke and adverse events," was written by Dr Arhuidese and co-authors from the University of South Florida.[3] This Vascular Quality Initiative study included 13,698 carotid artery stenting procedures. Periprocedural hypertension resulted in a fourfold increase in immediate periprocedural stroke. Periprocedural hemodynamic events increased the risk of immediate periprocedural stroke and also the length of stay, myocardial infarction, and mortality. The study found prophylactic use of antibrandyarrhythmic agents decreased the risk of periprocedural stroke in patients with symptomatic carotid artery disease.

The next article I would like to introduce was written by Emmanuel Tenorino, Gustavo Oderich, and colleagues from Mayo Clinic, entitled "Prospective nonrandomized study to evaluate cone beam computed tomography for technical assessment of standard and complex endovascular aortic repair."[4] This prospective, single-center study evaluated the benefit of cone beam computed tomography (CT) in 170 aortic interventions. The authors found positive findings in 25%; these included stent compression and kink, type I and III endoleaks, dissections, and thrombosis. As an example, cone beam CT revealed compression of a superior mesenteric artery stent and then confirmed effective treatment with balloon angioplasty during fenestrated-branched endovascular aneurysm repair. Positive CT findings were more frequent for fenestrated-branched endovascular aneurysm repair than for other procedures (35% vs 16%), and the study also found that digital subtraction angiography alone would not have detected the positive findings in 79% of the cases.

The final paper I would like to present is "A randomized controlled trial of drug-coated balloon angioplasty in venous anastomotic stenosis of dialysis arteriovenous grafts," authored by Dr Liao and colleagues from Taiwan.[5] In this prospective, randomized controlled trial, 44 patients with venous anastomotic stenosis underwent angioplasty either with paclitaxel-coated or with conventional balloon. The primary end point was target lesion primary patency at 6 months, which was significantly better after drug-coated than after conventional balloon angioplasty, and the difference was also significant between the two groups in 6-month access circuit patency. While the 1-year target lesion patency was still significantly better after drug-coated balloon angioplasty, the difference between access circuit patency was no longer statistically significant and there was no difference in anatomic or clinical success between

the groups. The study concluded that drug-coated balloons showed a modest improvement at 6 months, but by 1 year, the benefit was not durable and repeat interventions were equally needed in both groups.

These were just a few of the many excellent papers we published in the June issue of the *JVS*. Hope you will enjoy reading them. Please follow us on social media and remember in this time of crisis to protect your patients, yourself, and your family from the coronavirus. Thank you for watching and see you next time for the highlights of the July issue of the *Journal of Vascular Surgery*.

The video accompanying this article may be found online at www.jvascsurg.org.

REFERENCES

1. Rasmussen TE, Koelling EE. A military perspective on the vascular surgeon's response to the COVID-19 pandemic. J Vasc Surg 2020;71:1821-2.
2. Salata K, Hussain MA, de Mestral C, Greco E, Awartani H, Aljabri BA, et al. Population-based long-term outcomes of open versus endovascular aortic repair of ruptured abdominal aortic aneurysms. J Vasc Surg 2020;71:1867-78.
3. Arhuidese IJ, Ottinger ME, Shukla AJ, Moudgil N, Armstrong P, Illig K, et al. Hemodynamic events during carotid stenting are associated with significant periprocedural stroke and adverse events. J Vasc Surg 2020;71:1941-53.
4. Tenorio ER, Oderich GS, Sandri GA, Ozbek P, Kärkkäinen JM, Vrtiska T, et al. Prospective nonrandomized study to evaluate cone beam computed tomography for technical assessment of standard and complex endovascular aortic repair. J Vasc Surg 2020;71:1982-93.
5. Liao MT, Lee CP, Lin TT, Jong CB, Chen TY, Lin L, et al. A randomized controlled trial of drug-coated balloon angioplasty in venous anastomotic stenosis of dialysis arteriovenous grafts. J Vasc Surg 2020;71:1994-2003.