Hello and welcome to the June 2020 edition of Vascular Disease Management. In this edition I will allow our readers to visit the Cardiovascular Institute of the South (CIS) Virtual Care Center and further discuss our utilization of this center in the pre- and post- Covid-19 pandemic. This interview and virtual tour will be released later this month.

For this month’s editorial I have chosen to comment on the article authored by Drs Jovan Markovic and Cynthia Shortell titled: “Hybrid Approach to Chronic and Acute-on-Chronic Mesenteric Ischemia With Retrograde Stenting of the Superior Mesenteric Artery via Jejunal Arterial Access”.

I have chosen to comment on this article as the treatment of mesenteric ischemia has been challenging and is associated with high morbidity and mortality rates. These patients are typically frail and often malnourished. Surgical bypass has been the “gold standard” of treatment but is associated with significant morbidity and mortality as pointed out by the authors. Stenting of the mesenteric vessels with balloon expandable bare metal and covered stents after crossing the arterial obstruction in antegrade manner from the aorta has proven to be an effective therapeutic option associated with lower morbidity and mortality rates, but it has limitations. Patency of celiac artery stents is substantially lower than mesenteric artery stents secondary to median arcuate ligament compression. Crossing totally occluded flush occlusions of these vessels in an antegrade manner is often impossible secondary to poor support and difficulty knowing exactly where the ostium is located. Occasionally, trans-collateral passage of a totally occluded superior mesenteric artery (SMA) via a highly stenotic celiac artery access is possible but this is always difficult and once crossing has been achieved, balloon and stent delivery may not be feasible.

These authors report the utilization of a retrograde jejunal arterial access placed via a mini-laparotomy to cross the stenosis or total obstruction at the ostium. The mini-laparotomy is less stressful to the patient and the jejunal arterial access is performed only for wire placement to cross the arterial obstruction following which the wire is snared in the abdominal aorta via a guiding catheter placed in one of the standard peripheral arterial interventional access sites. PTA and stenting are subsequently performed via the peripheral access site with excellent guiding catheter support secondary to the capability of utilizing a tethered wire. Following successful stent implantation, the arterial access site and the mini-laparotomy are closed via standard surgical technique. If attempted SMA stenting is unsuccessful, then the patient is converted to a standard laparotomy and surgical bypass is performed.

This article is representative of the many benefits of hybrid approaches in treating severe vascular disorders. I think this approach would be most useful when the SMA is totally occluded where antegrade crossing with wires is usually unsuccessful.

The trend in vascular intervention is towards less invasive treatments associated with less morbidity in these patients who are often elderly and infirm.