ECONOMIC IMPLICATIONS OF ENDOVENOUS GREAT SAPHENOUS ABLATION IN A PUBLIC HEALTH CARE SYSTEM, June 2018, Journal of Vascular Surgery: Venous and Lymphatic Disorders

CHICAGO, Illinois, July 2018 – New research from the Canadian public health system indicates that it is significantly more economical to provide endovenous ablation in an ambulatory setting than in a hospital.

Offering less invasive therapies to patients with vascular disease has been the hallmark of progress in vascular surgery over the past several decades. One of the most significant advances has been the endovenous ablation (EVA) of the superficial venous system as opposed to the traditional open surgical technique of high ligation and stripping (HL/S).

EVA, which is most commonly performed via radiofrequency ablation (RFA) or endovenous laser (EVL) therapy, is increasingly being offered to patients in the ambulatory care setting using local (tumescent) anesthesia as opposed to in a hospital operating rooms under general anesthesia.

Previous work has revealed increased procedural costs for these minimally invasive procedures due to costly equipment and disposable items such as the generators and catheters. What has not been previously documented is the overall cost of doing traditional open surgery in the operating room versus EVA in the office setting. Further, it is unclear if the demand for the minimally-invasive approach might drive up societal healthcare costs solely on the basis of increasing volume.

As reported in the July 2018 edition of the Journal of Vascular Surgery: Venous and Lymphatic Disorders (JVS-VL), researchers from the University of Saskatchewan led by vascular surgeon Dr. David Kopriva, retrospectively reviewed administrative data to capture cases of HL/S and EVA between 2003-2014, all performed within their public healthcare system. In doing so, the researchers compared utilization rates and healthcare costs in the pre- (2003-2006) and post-EVA (2010-2014) eras.

The highlights of their analysis included: • No change in utilization rates in treating saphenous vein reflux (90 cases yearly pre-EVA vs. 92 cases yearly post-EVA) • Reduction in case costs ($1,965 HL/S vs. $1,295 EVL or $1,410 RFA) • Reduction in annual costs ($176,860 HL/S vs. $134,524 EVA).
“The cost savings associated with moving most great saphenous vein procedures from a day-surgery and operating room setting to an ambulatory care setting more than compensated for the expenses incurred,” notes Dr. Kopriva.

Interestingly, Kopriva said, “Contrary to our initial hypothesis, we did not observe an increase in the use of great saphenous vein ablation after the introduction of EVL and RFA into our publicly funded health system.” Such an increase in volume may have offset the decrease in costs realized in moving the procedure to the ambulatory care setting.

It is important to note that the savings documented are due to the change in the procedural setting, and are not particular to the use of EVL or RFA. For those who practice this type of venous work, this study clearly suggests one must move out of the operating room to realize the economic benefits of the less-invasive procedures.

The complete article is available from through Aug. 31 at vsweb.org/JVS-VLablation.

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