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Welcome

In this fourth issue of the CABG BULLETIN, we reviewed the April-May editions of several peer-reviewed journals. It brings us much joy to also include two new publications of our external support device for vein grafts - VEST.

We hope you will find the information summarized here, interesting and useful.
Enjoy!



External stenting and disease progression in saphenous vein grafts two years after coronary artery bypass grafting: A multicenter randomized trial (VEST III)

David P. Taggart et al.

This prospective, post-market randomized controlled trial aimed to validate the effect of VEST external support for vein grafts on Fitzgibbon perfect patency scale and mitigation of intimal hyperplasia 2 years after CABG. The study design included in-patient randomization with one saphenous vein graft randomized to receive VEST external stent and 1 non-stented saphenous vein graft that served as the control.

184 patients were enrolled in the study in multiple centers in Europe, 128 patients completed the angiography assessment and the entire pre-specified cohort completed the IVUS.

At 2 years, the trial met its primary and secondary endpoints showing superior Fitzgibbon patency rates and a significant reduction in intimal hyperplasia area and thickness assessed by IVUS, of the VEST externally stented vein grafts compared to the control, however, overall patency rates were similar between the stented and non-stented groups

The authors concluded that the study shows that external stenting is designed to minimize disease progression in the SVG over the longer term, yet whether this will eventually lead to improved long-term patency is still unknown.

[Full Text](#)



External stenting of vein grafts in coronary artery bypass grafting: interim results from a two centers prospective study

Luca Paolo Weltert et al.

The objective of this prospective all-comers' registry study was to evaluate the safety and the short-term performance of VEST external stent in routine practice which includes a heterogeneous group of patients undergoing on- and off-pump CABG, single and sequential grafting, and the use of multiple external stents per patient.

102 patients were enrolled in this study. All patients completed CT-angiography assessment at 6–12 months and a clinical follow-up with a mean duration of 20 months (range 6–54 months).

84% of the patients had all SVGs supported with VEST and 16% (n=16) had at least one SVG with VEST and one unsupported.

This allowed for the creation of a within-patient reference group of non-stented SVGs for the analysis of VEST performance.

50% of cases were performed off-pump and 44% included sequential grafts.

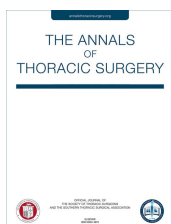
The results showed 100% patency for the arterial grafts (LIMA, RIMA) and 98% patency for the VEST-SVGs (n=100) compared to 87.5% in the unsupported-SVG group (n=16).

Lumen Uniformity was demonstrated in 90% of the VEST-SVGs compared to 37% of the Unsupported-SVG. In-hospital MACCE included 2 patients (~2%).

During the follow-up period, the MACCE rate was 0%.

The authors find external stenting to be safe and easily integrated into routine CABG practice and will prospectively follow all patients via phone call and/or visit every 6 months for a period of 5 years.

[Full Text](#)



Device use for proximal anastomosis on ascending aorta in off-pump coronary artery bypass grafting

Aya Saito et al.

Stroke is one of the most serious postprocedural complications of CABG, which implicates the choice of medications, interventions, and surgical techniques.

This retrospective observational study compared differences in postoperative results between OPCAB cases with aortic no-touch and proximal anastomosis device use to determine the impact of aortic manipulation on postoperative results, particularly neurological events.

Data was collected from JCVSD nationwide registry, and 5012 patients were propensity-matched following an isolated OPCAB procedure performed as No-touch or with proximal anastomosis device (including the HEARTSTRING, ENCLOSE II, and PAS-PORT systems).

The primary outcome of stroke was similar in the two groups, Thirty-day and operative deaths were also similar.

Significant differences were observed in new-onset AF and homologous transfusion use, both higher for the device group.

The authors concluded that Device use did not increase postoperative neurological complications and device use may be regarded as a viable choice after thoroughly balancing a particular patient's preoperative status, the locations of coronary artery targets requiring revascularization, and overall cost-benefit.

[Abstract](#)



Management of Patients with Aortocoronary Saphenous Vein Graft Aneurysms: JACC State-of-the-Art Review

Mattia Vinciguerra et al.

A systematic review of 256 papers looking at 368 Saphenous Vein Graft Aneurysms (SVGA), aiming to provide a guideline treatment algorithm for the management of this underestimated complex condition.

SVGA is a rare and potentially fatal complication of CABG, with estimated occurrence in 0.07% of vein grafts. SVGA is commonly presented as an incidental finding on follow-up imaging or following investigations for cardiorespiratory symptoms, such as chest pain, dyspnea, or hemoptysis.

The review found no specific preoperative risk factors identified to trigger SVGA however the average age of diagnosis is at 67 and a presentation is at approximately 15 years post CABG. 27.5% of all cases were diagnosed incidentally, including undiagnosed autopsies.

The proposed Management Algorithm for SVGA points out the importance of a multidisciplinary heart team discussion settings involving the cardiologist, cardiac surgeon, and radiologist, the clinical presentation to orient patient management, and the cautious considerations in conservative management of SVGAs in cases of incidental asymptomatic, small-sized SVGA (<40 mm).

[Abstract](#)

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AUTHORS	TITLE	YEAR	JOURNAL	DOI/ URL
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