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Invited Commentary

Commentary on "Use of endoscopic vein harvesting (EVH) during coronary artery bypass grafting in United Kingdom: The EVH survey?"

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While the usage of Endoscopic Vein Harvesting (EVH) has been on the rise, with an adoption of 90% in the USA, uptake in the United Kingdom has lagged behind. Thus, the study by Soni et al. to establish the EVH usage in the UK and identify the barriers is extremely relevant [1].

This online questionnaire-based survey had a response rate of 52% (139/267) which is higher than a similar questionnaire-based study involving cardiac surgeons in the UK [2]. The questionnaire had good internal consistency but respondent bias and bias of acquiescence, inherent to these surveys remain.

The study confirms that adoption of EVH in the UK remains low with only 25% of the respondents confirming regular usage. This was similar to another report where 33% of respondents confirmed adoption of EVH [2]. However, non-responders can often be non-users of the technique and thus the actual adoption maybe even lower.

The barriers identified by the study were concerns over patency. cost and presence of a learning curve. By reducing leg wound infections, it is only logical that the cost of EVH would be at least partially offset. A multicentre trial in the UK confirmed that cost-effectiveness was actually better with EVH [3]. However, the more important concern is graft patency. While many of the earlier studies suggested that EVH was independently associated with vein-graft failure and adverse clinical outcomes, newer studies have confirmed that EVH not only reduces leg wound complications but also has comparable 6-month patency rates. The Randomized Endovein Graft Prospective (REGROUP) trial further confirmed that composite outcome of major adverse cardiac events, including death from any cause, non-fatal myocardial infarction, and repeat revascularization were similar to the open harvesting technique [4]. This change in the evidence base has led to revision of the NICE guidelines. The NICE guidelines in 2010 had expressed concerns over patency rates but in 2014 the revised guidelines declared that there was enough evidence to confirm the efficacy and safety of EVH. The 2018 ESC/EACTS Guidelines concluded that most data from meta-analyses, randomized and non-randomized trials do not demonstrate inferior clinical outcomes for EVH. However, the guidelines recommended that EVH should be undertaken by experienced operators [5].

Operator experience or going past the learning curve indeed appears to be the key. As experience with the technique increased worldwide the outcomes reported by various studies also started improving. Thus, the improvement in outcomes can be directly linked to the increased operator experience. The importance of operator experience was evident in the REGROUP study where 456 eligible patients were not enrolled due to unavailability of an experienced operator. Expertise was defined as a minimum of 100 EVH with a conversion rate < 5% [5].

The current study does well to identify the barriers behind low adoption of EVH in the UK. It also alleviates some of the major concerns over patency by providing evidence of improved patency and outcome from studies carried out in various other centres confirming that it is not the technique but the experience with the technique that is instrumental for better outcomes.

Conflicts of interest

None.

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None.

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