HHS Public Access

Author manuscript

JACC Cardiovasc Interv. Author manuscript; available in PMC 2023 February 22.

Published in final edited form as:

JACC Cardiovasc Interv. 2022 August 22; 15(16): 1685. doi:10.1016/j.jcin.2022.06.031.

REPLY: Alternative Access Options for Transcatheter Aortic Valve Replacement

Robert J. Lederman, MD[*],

Toby Rogers, BM BCh, PhD,

Vasilis C. Babaliaros, MD,

Adam B. Greenbaum, MD

authors

Cardiovascular Branch Division of Intramural Research National Heart Lung and Blood Institute National Institutes of Health Building 10, Room 2c713, MSC 1538 Bethesda, Maryland 20892-1538, USA

De Backer and colleagues report local institutional eligibility in Copenhagen in the last 158 nonfemoral transcatheter aortic valve replacement (TAVR) patients to be 77% for transaxillary access; 41% for transcaval access; and 0.1% for no transvascular access.

Their local experience reflects interinstitutional variability, which we also observed. In our report of 7,132 TAVR procedures at 8 U.S. centers, we found that that 407 (5.4%) were selected to undergo nonfemoral access.[1] Table 1 shows that selection (admittedly different from eligibility) for transcaval access ranged from 9% to 100%; for transaxillary, from 0% to 84%; and for transthoracic (no transvascular access), 2% to 61%. Different operators may define eligibility differently, which is why 3 of 8 centers in our study were able to accomplish 100% of nonfemoral TAVR procedures via transcaval access.

De Backer and colleagues observed an admirably low incidence of stroke after transaxillary access, which is lower than the 6 of 7 studies we cited (weighted mean 6.7%, range 1.0%-7.9%). Overall the preponderance of published evidence suggests that transaxillary access is associated with higher rates of stroke than alternatives. Moreover, we found a substantially higher incidence of discharge directly to home and without stroke after transcaval versus transaxillary access.

In the end, we believe the transaxillary and transcaval populations to be more similar than different and therefore are open to meaningful comparisons.

[*]Cardiovascular Branch Division of Intramural Research National Heart Lung and Blood Institute National Institutes of Health Building 10, Room 2c713, MSC 1538 Bethesda, Maryland 20892-1538, USA, lederman@nih.gov.

The authors attest they are in compliance with human studies committees and animal welfare regulations of the authors' institutions and Food and Drug Administration guidelines, including patient consent where appropriate. For more information, visit the Author Center.

Acknowledgments

This work was supported by the Emory Structural Heart and Valve program intramural funds, and by National Institutes of Health grant Z01-HL006040 (to Dr Lederman). Dr Lederman and Rogers are coinventors on device patents, assigned to the National Institutes of Health, for closure of transcaval access ports. Dr Rogers has served as a consultant and physician proctor for Edwards Lifesciences, Medtronic, and Boston Scientific; has served on an advisory board for Medtronic; and holds equity interest in Transmural Systems. Drs Babaliaros and Greenbaum have served as consultants for Edwards Lifesciences and Abbott Vascular; have received institutional research contracts for clinical investigation of transcatheter aortic, mitral, and tricuspid devices from Edwards Lifesciences, Abbott Vascular, Medtronic, and Boston Scientific; and own equity interest in Transmural Systems.

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Table 1

Numbers of Patients Selected to Undergo Nonfemoral TAVR at 8 Individual Sites, by Access Route

Site	Nonfemoral	Transcaval	Transaxillary	Carotid	Thoracic
1	34	34 (100.0)	–	–	–
2	57	5 (8.8)	48 (84.2)	1 (1.8)	3 (5.3)
3	109	80 (73.4)	7 (6.4)	20 (18.3)	2 (1.8)
4	63	63 (100.0)	–	–	–
5	38	15 (39.5)	–	–	23 (60.5)
6	46	28 (60.9)	14 (30.4)	4 (8.7)	–
7	32	4 (12.5)	18 (56.3)	4 (12.5)	6 (18.8)
8	28	9 (32.1)	19 (67.9)	–	–
All	407	238 (58.5)	106 (26.0)	29 (7.1)	34 (8.4)

Values are n or n (%).

TAVR = transcatheter aortic valve replacement.