

Letter by Levy and Tribouilloy Regarding Article, “Atrial Fibrillation Is Associated With Increased Mortality in Patients Undergoing Transcatheter Aortic Valve Replacement: Insights From the Placement of Aortic Transcatheter Valve (PARTNER) Trial”

To the Editor:

We read with great interest the article by Biviano et al,¹ which addressed the impact of atrial fibrillation (AF) on clinical outcome in patients undergoing transcatheter aortic valve replacement. The authors brilliantly showed that for transcatheter aortic valve replacement patients, AF is associated with increased mortality at 30 days and 1 year, and repeat hospitalizations at 1 year. This article contributes to the awareness of the pejorative prognostic value of AF in aortic stenosis (AS). Valvular heart diseases, especially mitral diseases, are well known to be associated with AF, but the prognostic implications of AF in AS has long remained underrated. The prevalence of AF increases with age because AF is associated with a variety of concomitant conditions, including aging, hypertension, heart failure, valvular heart disease, diabetes mellitus, coronary artery disease, or thyroid dysfunction. Such comorbidities are not only causative factors, but also markers of global cardiovascular risk, explaining the increased rates of death, stroke, thromboembolic events, heart failure, left ventricular dysfunction and hospitalization, degraded quality of life, and reduced exercise capacity reported in AF patients.² Previous studies from our group showed the negative influence of AF on overall survival in patients with severe AS with low gradient–low ejection fraction.^{3,4} More recently, we reported, in patients with AS with preserved ejection fraction, that AF has a major impact on the risk of death in both medically and surgically managed patients, irrespective of the functional status and the severity of AS.⁵ Thus, we think that, beside the risk of thromboembolism, AF is a powerful marker of risk of death in AS. Therefore, particular care in patients with AS should be taken in case of AF, and AF should be considered for clinical decision making. In short, though AF is common in AS, it is not benign.

Disclosures

None.

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References

1. Biviano AB, Nazif T, Dizon J, Garan H, Fleitman J, Hassan D, Kapadia S, Babaliaros V, Xu K, Parvataneni R, Rodes-Cabau J, Szeto WY, Fearon WF, Dvir D, Dewey T, Williams M, Mack MJ, Webb JG, Miller DC, Smith CR, Leon MB, Kodali S. Atrial fibrillation is associated with increased mortality in patients undergoing transcatheter aortic valve replacement: insights from the Placement of Aortic Transcatheter Valve (PARTNER) trial. *Circ Cardiovasc Interv.* 2016;9:e002766. doi: 10.1161/CIRCINTERVENTIONS.115.002766.
2. Kirchhof P, Lip GY, Van Gelder IC, Bax J, Hylek E, Kaab S, Schotten U, Wegscheider K, Boriani G, Brandes A, Ezekowitz M, Diener H, Haegeli L, Heidbuchel H, Lane D, Mont L, Willems S, Dorian P, Aunes-Jansson M, Blomstrom-Lundqvist C, Borentain M, Breitenstein S, Brueckmann M, Cater N, Clemens A, Dobrev D, Dubner S, Edvardsson NG, Friberg L, Goette A, Gulizia M, Hatala R, Horwood J, Szumowski L, Kappenberger L, Kautzner J, Leute A, Lobban T, Meyer R, Millerhagen J, Morgan J, Muenzel F, Nabauer M, Baertels C, Oeff M, Paar D, Polifka J, Ravens U, Rosin L, Stegink W, Steinbeck G, Vardas P, Vincent A, Walter M, Breithardt G, Camm AJ. Comprehensive risk reduction in patients with atrial fibrillation: emerging diagnostic and therapeutic options—a report from the 3rd Atrial Fibrillation Competence NETwork/European Heart Rhythm Association consensus conference. *Europace.* 2012;14:8–27. doi: 10.1093/europace/eur241.
3. Levy F, Laurent M, Monin JL, Maillet JM, Pasquet A, Le Tourneau T, Petit-Eisenmann H, Gori M, Jobic Y, Bauer F, Chauvel C, Leguerrier A, Tribouilloy C. Aortic valve replacement for low-flow/low-gradient aortic stenosis operative risk stratification and long-term outcome: a European multicenter study. *J Am Coll Cardiol.* 2008;51:1466–1472. doi: 10.1016/j.jacc.2007.10.067.
4. Levy F, Garayalde E, Quere JP, Ianetta-Peltier M, Peltier M, Tribouilloy C. Prognostic value of preoperative atrial fibrillation in patients with aortic stenosis and low ejection fraction having aortic valve replacement. *Am J Cardiol.* 2006;98:809–811. doi: 10.1016/j.amjcard.2006.03.067.
5. Levy F, Rusinaru D, Maréchaux S, Charles V, Peltier M, Tribouilloy C. Determinants and prognosis of atrial fibrillation in patients with aortic stenosis. *Am J Cardiol.* 2015;116:1541–1546. doi: 10.1016/j.amjcard.2015.08.018.

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