Tricuspid valve, the “forgotten” valve

Mira Stipčević*

Zadar General Hospital, Zadar,
Croatia

KEYWORDS: tricuspid valve, echocardiography, tricuspid regurgitation.

CITATION: *Cardiol Croat.* 2018;13(5-6):202. | <https://doi.org/10.15836/ccar2018.202>

***ADDRESS FOR CORRESPONDENCE:** Mira Stipčević, Opća bolnica Zadar, Bože Peričića 5, HR-23000 Zadar, Croatia. / Phone: +385-98-593416 / E-mail: mira.stipcevic@gmail.com

ORCID: Mira Stipčević, <https://orcid.org/0000-0003-4351-1102>

|||||

The tricuspid valve (TV) is very often neglected in routine echocardiographic examination. It is important to understand that tricuspid valve dysfunction is influential in patient outcomes¹. The most often seen TV pathology is tricuspid regurgitation (TR). The presence of mild TR is physiologic in 65-100% of the population². More than mild regurgitation is suspicious for tricuspid valve disease. Functional TR is the most frequent etiology. It is secondary to poor tricuspid leaflets coaptation due to dilatation of tricuspid annulus and right chambers secondary to left sided heart disease or pulmonary disease³. Organic tricuspid valve disease (regurgitation or stenosis) can be due to rheumatic heart disease, endocarditis, carcinoid heart disease or congenital heart disease. The presence of pacemaker or intra-cardiac defibrillator, as well as repeated right ventricle biopsies in transplanted patients can lead to tricuspid trauma and TR³. Functional TR, resulting from left sided disease, can be significantly influenced by hemodynamic factors, and most often would not resolve after correction of the underlying pathology.

It is essential to perform TV evaluation (morphology and function) in patients planned for cardiac surgery on a high quality transthoracic echocardiography and make decision whether TV warrants operative attention⁴. Whilst the surgical management at the extremes of TR (mild or severe) is relatively clear, the ideal intervention in intermediate grades, especially during concurrent left sided surgery remains uncertain and is the subject of ongoing research.

RECEIVED:
May 8, 2018

ACCEPTED:
May 10, 2018

LITERATURE |||||

1. Agricola E, Ingallina G, Slavich M, Tufaro V, Badano L, Oppizzi M, et al. Evidence of tricuspid valve remodeling in patients with severe mitral regurgitation independently of degree of functional tricuspid regurgitation: a two- and three-dimensional echocardiographic study. *J Heart Valve Dis.* 2014 Mar;23(2):200-8. **PubMed:** <https://www.ncbi.nlm.nih.gov/pubmed/25076551>
2. Monaco F, Di Prima AL, De Luca M, Barucco G, Zangrillo A. Periprocedural and perioperative management of patients with tricuspid valve disease. *Minerva Cardioangiol.* 2018 Apr 11. doi: [10.23736/S0026-4725.18.04699-6](https://doi.org/10.23736/S0026-4725.18.04699-6). [Epub ahead of print].
3. Ancona F, Stella S, Capogrosso C, Marini C, Fiscaro A, Margonato A, et al. Tricuspid valve imaging. *Minerva Cardioangiol.* 2018 Apr 11. doi: [10.23736/S0026-4725.18.04698-4](https://doi.org/10.23736/S0026-4725.18.04698-4). [Epub ahead of print].
4. Kelly BJ, Ho Luxford JM, Butler CG, Huang CC, Wilusz K, Ejiofor JI, et al. Severity of tricuspid regurgitation is associated with long-term mortality. *J Thorac Cardiovasc Surg.* 2018 Mar;155(3):1032-1038.e2. <https://doi.org/10.1016/j.jtcvs.2017.09.141>