

AMERICAN COLLEGE of CARDIOLOGY®

KEY TAKEAWAYS

The ACC's Heart House Roundtable, **Tricuspid Valve Disease: Building Frameworks for Success from Clinical and Real-World Advances** identified the following key takeaways:

1 Significant tricuspid regurgitation (TR) is underdiagnosed.

- a. Moderate TR is associated with adverse outcomes and qualitative grading of moderate TR may need comprehensive quantitative measures, exercise stress testing and/or referral to Level I Valve Centers, with dedicated Tricuspid Valve Heart Teams that can provide these metrics.
- b. A specialized TR Heart Team which includes interventional cardiologists, surgeons, Advanced Practice Providers, advanced heart failure, and electrophysiology subspecialists will be beneficial.
- c. Other clinical, imaging, or biological markers of severe TR may help improve detection of TR and these require further identification and study.
- d. Education of all professionals and patients in the cause, presentation, diagnosis, and management options may improve diagnosis and outcomes.

2 Management of TR remains ill-defined.

- a. In the setting of common co-morbidities and concomitant disease (i.e., left heart failure with preserved ejection fraction or reduced ejection fraction), patients with TR are complex and management will not typically rely solely on diuretic therapy.
- b. Collaboration is important in the coordination of TR management strategies. There is a need for guidance on patient selection, device selection, and timing of intervention, along with defining guideline directed medical therapy for these patients.
- c. The primary goal of diuretics for TR is decongestion. The challenges are optimization of medical therapy for TR and how to address diuretic resistance.
- d. The overall goals of TR therapy (i.e., mortality, heart failure rehospitalization, functional capacity, or quality of life) may determine the appropriate management strategy.



Increase awareness of TR in patients.

- a. Clinician education about the patient with TR, including treatment options as well as current knowledge gaps, will help with diagnosis and management of this disease.
- b. Patient education will be important, so they are aware of the range and purpose of tests and procedures available as well as what to expect post-procedure.

5 Selection of appropriate endpoints for TR is challenging.

- a. The important endpoints in clinical trials of TR include cardiovascular death, heart failure hospitalization, quality of life metrics and symptom improvement, functional improvement, and reduction in TR.
- b. Depending on the severity and etiology of tricuspid regurgitation, as well as the specific outcome measure, assessing the benefits of TR reduction may require >1 year of longitudinal follow-up.
- c. The use of changes in diuretics as an outcome should be explored understanding that escalation of medical therapy may be multi-factorial, representing possible progression of congestion (i.e., worse TR) or greater diuretic responsiveness (i.e., improvement in TR).
- d. The relationship between the degree of TR reduction and clinical benefit is unclear.
- e. There would be a great value for a TR "disease based" registry collecting real world evidence on the medical, catheter-based interventional and surgical strategies in TR management.



3 Diagnosis of TR severity remains non-standardized.

- a. Echo imaging protocols and structured reports are not standardized for the diagnosis of TR. Similarly, clinical and research quantitative grading of TR may remain separate but requires clarification for the clinician.
- b. Right heart remodeling such as dilatation and dysfunction significantly influences outcomes, and quantitation of right heart function should be standardized for all imaging modalities.
- c. The standardization of right heart catheterization in detecting the type and severity of pulmonary hypertension may guide therapy.