Abstract

Transcatheter edge-to-edge repair (TEER) for severe, symptomatic tricuspid regurgitation (TR) is a novel therapy that has been shown to be highly effective and safe. The goal of the therapy is to restore coaptation planes, typically for patients with leaflet gaps of 10 mm or less. Views in the RV inflow/outflow, with sweeping of the anterior and posterior planes, as well as transgastric short axis imaging is essential for the imaging of the tricuspid valve to perform the procedure. In many instances, intracardiac echocardiography is helpful for guidance. In the randomized TRILUMINATE pivotal clinical trial, TriClip was found to reduce TR to moderate or less in 88%, and this reduction was sustained throughout 1 year follow-up. TriClip was very safe, with an MAE rate of only 1.7%, bleeding of 4.7%, and a pacemaker rate of only 0.6%. The single arm of TRILUMINATE will be shown at TCT 2023 in the LBCT session. PASCAL has similar effectiveness and safety in the early feasibility study, and is the subject of the ongoing CLASP-TR pivotal trial. Tricuspid TEER is an important therapy that is effective and safe, and is leading the development of new clinical pathways for diagnosis and treatment, including new nomenclature, advanced imaging with TEE, ICE, CT and MRI, and more opportunities for patients at risk to be treated.