Quantification of tricuspid regurgitation (TR) is rarely performed in clinical practice due to time constraints and difficulty in obtaining measurements. The utility and feasibility of directly measured orifice area (AROA) from three-dimensional (3D) transfemoral color Doppler echocardiography correlates well with 2D TR jet area/RA area ratio.}

**Methods**

Patients: 92 patients with > mild TR (without multiple TR jets) prospectively underwent 2D and 3D transthoracic echocardiography. Patients with atrial fibrillation (AF) were excluded prospectively. Twenty patients with AF were included, 29 patients with PPM and 42 patients with PAC. Baseline Characteristics: 42 men and 50 women were enrolled (mean age of 71.3 ± 14.8 years). Twenty patients with AF were included, 29 patients with PPM and 42 patients with PAC.

**Results**

Baseline Characteristics: 42 men and 50 women were enrolled (mean age of 71.3 ± 14.8 years). Twenty patients with AF were included, 29 patients with PPM and 42 patients with PAC ([Table 1]).

**Figures**

1. Figure 1: Two-dimensional (2D) derived methods of measurement of the TR jet area using different software packages.
2. Figure 2A: Correlation between AROA and EROA.
3. Figure 2B: Bland-Altman analysis of agreement of AROA and EROA.
4. Figure 3: Linear correlation between AROA and EROA.
5. Figure 4: Correlation of AROA with EROA.
6. Figure 5: Subgroup analysis of the correlation of AROA and EROA.
7. Figure 6: Schematic diagram of the correlation of AROA and EROA.
8. Figure 7: Effect of jet eccentricity on correlation of AROA and EROA.
9. Figure 8: Effect of baseline rhythm on correlation of AROA and EROA.

**Conclusions**

- Direct measurement of AROA from 3D color Doppler echocardiography correlates well with 2D TR jet area/RA area ratio in the majority of patients but not performed well in AF patients.
- Direct measurement of AROA from 3D transfemoral color Doppler echocardiography correlates well with 2D TR jet area/RA area ratio in the majority of patients but not performed well in AF patients.
- Although direct measurement of AROA from 3D tricuspid orifice area quantification using 3D transthoracic color Doppler echocardiography correlates well with 2D TR jet area/RA area ratio in the majority of patients but not performed well in AF patients.
- Direct measurement of AROA from 3D color Doppler echocardiography correlates well with 2D TR jet area/RA area ratio in the majority of patients but not performed well in AF patients.