

Conclusion: MM-TAPSE and 2D-TAPSE correlate strongly. 2D-TAPSE can provide a reliable alternative to MM-TAPSE to quantitatively measure RV systolic function and may be especially useful in situations where retrospective comparisons are sought.

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34. Radial artery ultrasound preceding transradial coronary angiography

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Background and purpose: Transradial approaches (TRA) became the preferred vascular access during conventional coronary angiography (CCA). In fact a smaller mean radial artery diameter (RAD) may lead to higher rates of vascular access complications (VAC); however, there are no data regarding the effect of radial cross sectional area (CSA) and perimeter. We therefore evaluated the impact of preprocedure radial artery diameter, CSA and perimeter on vascular complications.

Methods: We conducted a single-center prospective analysis of 207 patients underwent CCA. A radial artery ultrasound performed pre and post CCA to measure RAD, CSA, and perimeter.

Results: The average RAD, CSA and perimeter were (2.7 ± 0.55 mm), (6.3 ± 1.9 mm²), (9.2 ± 1.7 mm) respectively. The same measurements were significantly larger in men than in women (2.8 ± 0.5 vs. 2.3 ± 0.4 mm [$P < 0.0001$], 6.7 ± 1.8 vs. 4.9 ± 1.4 mm [$P < 0.0001$], and 9.6 ± 1.5 vs. 9 ± 1.7 mm [$P = 0.001$], respectively). Fourteen patients (6.8%) had VACs. The RAD, CSA and perimeter were significantly smaller in procedures with VACs than in procedure with no complications (2.1 ± 0.5 vs. 2.7 ± 0.5 [$P = 0.014$], 4.6 ± 1.4 vs. 9.4 ± 1.6 [$P = 0.014$], and 7.2 ± 1.8 vs. 9.4 ± 1.6 [$P = 0.022$], respectively). Univariate logistic regression showed that radial ultrasonic parameters can independently predict VACs as follows: RAD (Odds ratio (OR) = 1.4. 95% CI 1.08–1.68, $p = 0.007$) for RAD, (OR = 2. 26. 95% CI 1.11–4.58, $p = 0.24$) For CSA and (OR = 2.86. 95% CI 1.3–6, $p = 0.006$) for perimeter.

Summary: ultrasonic study of the radial artery before CCA can provide important information regarding the vascular access. We found that a smaller radial diameter, CSA and perimeter are associated with higher rates of VACs.

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35. Incomplete right ventricular remodeling after transcatheter atrial septal defect closure in pediatric age

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Background: Published data showing the intermediate effect of transcatheter device closure of atrial septal defect (ASD) in the pediatric age group are scarce.

Objective: To assess the effects of transcatheter ASD closure on right and left ventricular functions by tissue Doppler imaging (TDI).

Patients & Methods: The study included 37 consecutive patients diagnosed as ASD II by TTE and TEE and referred for transcatheter closure at Cairo University Specialized Pediatric Hospital, Egypt from October 2010 to July 2013. 37 age and sex matched was selected as control group. TDI was obtained using the pulsed Doppler mode, interrogating the right cardiac border (the tricuspid annulus) and interventricular septum (lateral mitral annulus) and myocardial performance index (MPI) was calculated at 1, 6 and 12 months post device closure.

Results: Transcatheter closure of ASD and echocardiographic examinations were successfully performed in all patients. There were no significant differences between two groups as regards age, gender, weight or BSA. By TDI, patients with ASD had significantly prolonged IVCT, IVRT and MPI compared to control group. Decreased tissue Doppler velocities of RV and LV began at 1 month post-closure compared to the controls. Improvement of RVMPI and LVMPI began at 1 month post-closure but still they are prolonged till 1 year.

Conclusion: Reverse remodeling of right and left ventricles began 1 month after transcatheter ASD closure but didn't completely return to normal even after 1 year follow-up by TDI.

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36. Clinical profile of coronary slow flow phenomena – A cardiac Y syndrome

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Background: Coronary slow flow phenomenon (CSFP) is characterized by delayed progression of the contrast medium injected through the coronary tree during Coronary Angiogram (CAG). CSFP is usually observed in patient with various spectrum of Coronary Artery Disease including Acute Coronary Syndrome and