

JCK Poster

JCK Poster 1 (II-JCKP1)

Basics/New Insights/Others

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Sat. Jul 8, 2017 6:15 PM - 7:15 PM Poster Presentation Area (Exhibition and Event Hall)

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[II-JCKP1-01] Is younger the better for cardiac remodeling with transcatheter ASD closure in adult patients regardless of diastolic dysfunction?

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Background: With the transcatheter closure of atrial septal defect (ASD), it is noticeable for the change of left atrium and left ventricle at longterm follow-up. The purpose of this study was to assess the cardiac remodeling with the aspect of diastolic function in adult ASD patients.

Methods and results: Asymptomatic thirty eight patients (48.6 ± 17.1 years) on the diagnosis of ASD from health check-up who underwent ASD device closure were enrolled. The defect size was 21.77 ± 6.79 mm. The medical records were reviewed and divided into two groups : I <50year old (33.06 ± 9.43), II ≥ 50 year old (62.55 ± 7.54). The echocardiographic data in between pre-closure and follow-up showed significant differences at LVEDD (40.76 ± 3.28 vs 43.39 ± 3.52 , $p < 0.001$), LV mass (99.64 ± 28.81 vs 116.57 ± 32.03 , $p < 0.01$), and RV pressure (36.88 ± 12.20 vs 31.81 ± 11.11 , $p = 0.04$). Then, at post-closure follow-up, tissue Doppler measurements were significantly decreased and E/E' (8.79 ± 3.19 vs 11.58 ± 4.80 , $p < 0.005$) was more elevated than pre-closure. Between the two groups, mitral A, tissue Doppler E', A', S' were all decreased, and E/E' (pre : 7.41 ± 1.42 vs 9.60 ± 5.15 , $p < 0.003$, post : 10.49 ± 3.95 vs 13.03 ± 4.05 , $p < 0.02$) was much higher at group II at both pre-closure and longterm follow up as well.

Conclusion: After the transcatheter ASD closure in adults, it might be masked for severe diastolic deterioration. Relative younger age might be better for the remodeling to protect myocardial function after transcatheter closure of ASD. Thus, it may benefit to close ASD as earlier age as possible in adults.