



EFFICACY OF MODIFIED BALLOON-ASSIST TECHNIQUE IN IMPLANTATION FOR LARGE ASD

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History and physical:

A case of ASD in a 9-year-old boy was referred to our hospital for transcatheter closure.

Imaging:

Defect size was 27.7*16.4 mm with Bald Ao, short superior, SVC and posterior rim and left atrial cavity was small on TEE. Because sizing diameter was 28.5mm and atrial septal length during sizing was 38.4mm, OFF II 30mm device was selected for intentional implantation in flared shape on Valsalva side.

Indication for intervention:

Existence of an enlargement of right heart

Intervention:

In a technique including right upper pulmonary vein approach, modified LA roof technique, and balloon-assist technique, the anterior part of the LA disc fell off into the RA on the Valsalva side and could not be implanted due to the small left atrial cavity. We combined the right superior pulmonary vein approach with balloon-assist technique using a fully dilated 30mm Amplatzer sizing balloon (modified balloon-assist technique), and the balloon acted as a cushion to prevent the LA disc from falling out of the RA and implantation was successfully achieved. Six months have passed since implantation, and there have been no complications including residual shunt, migration, erosion, or arrhythmia.

Learning points of the procedure:

The modified balloon-assist technique is useful for cases in which implantation is difficult even with the balloon assist technique due to the widely shortage of rim and small left atrium cavity.

