

Tricuspid septal leaflet detachment as an access for VSD closure ; Safety and convenience assured by TEE

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Abstract:

Background:

Successful transatrial closure of a VSD requires excellent visualization and examination, both by the naked eye and TEE, of the margins of the defect in order to avoid any residual VSDs.

Aim of work:

To evaluate our experience in this approach compared to the routine trans atrial approach without detachment of the tricuspid valve septal leaflet, by the aid of TEE for assessment, and how beneficial it is to our patients.

Patients and methods:

From March 2008 till September 2010, transatrial closure of isolated ventricular septal defects was performed in 48 patients, between Kasr El Ainy Medical School, Cairo University and Prince Sultan Cardiac Center at Riyadh, Saudi Arabia. Tricuspid valve detachment (TVD) was used in 24 cases, the patients of whom represented group A; vs. another 24 patients, group B, where closure of VSDs was done through the tricuspid valve orifice without detachment of any of its leaflets.

Results:

Two in hospital mortalities occurred in this study, one hospital mortality was in group B (4%) and another one in group A (4%). Both were due to non cardiac related issues.

Otherwise, there were no complications as regarding heart block, significant tricuspid regurgitation, or long standing residual septal defects. No high-degree atrioventricular block was encountered.

Conclusion:

Use of TVD followed by TEE assessment to optimize and assess visualization of the defect may result in decrease in cross clamp and total pump times, with preservation

of tricuspid valve function with no added risk of heart block or significant tricuspid regurge.

Key words: TVD - TR - VSD

TVD: Tricuspid valve septal leaflet detachment

TR: Tricuspid regurge

VSD: Ventricular septal defect