ATRIAL SEPTAL DEFECT
WITH SEVERE PULMONARY HYPERTENSION

CASE REPORT

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In patients with an atrial septal defect and severe pulmonary hypertension, the important thing to do before percutaneous closure is to determine whether the pulmonary resistance is reversible.

One simple technique is to transiently occlude the septal defect using a balloon catheter and evaluate the hemodynamic response.
Method

• We did transiently occlude the septal defect using a balloon catheter and evaluate the hemodynamic response of the patient

• This is a prospective pre and post study with teaching hospital-based study setting.
Results

- A patient (female, 40 yo) with an atrial septal defect (diameter 23 mm) and severe pulmonary hypertension (Right ventricular systolic pressure (RVSP) 120 mmHg).

- This patient had a positive result (defined as no further increasing in RVSP) using transient balloon catheterization test.
The reduction of pulmonary pressure observed during the test was maintained over at least one day, 1 month, 3 months, and 12 months after the closure.
Results (cont..)

We also measured NT pro BNP before closure, at 1 day, 1 month, 3 months, and 12 months follow up with significant reduction in NT pro BNP.
And there is a significant activity tolerance in 6 minutes walking test.
Results (cont..)  
Pre Balloon Data

MPA Pressure  
AoA Pressure
Results (cont..)
Post Balloon Data

MPA Pressure

AoA Pressure
Conclusion

Temporary balloon test occlusion before atrial septal occluded in atrial septal defect patients with severe PH can be a good indicator of the subsequent evolution of PH.
Thank you

감사합니다

Terima kasih