



TRANSCATHETER CLOSURE OF VENTRICULAR SEPTAL DEFECTS WITH LARGE ANEURYSM-LIKE POUCH

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History and physical:

These two cases present perimembranous ventricular septal defect with a very large aneurysm-like and cabbage shape pouch. The first case is an 8-year-old boy with a history of PM VSD from birth that was under observation and there was LVE in the last echocardiography. The second case is a 10-year-old boy with 30 Kg body weight and a large subaortic VSD that is restricted to an aneurysmal pouch with several exit orifices. In both cases, there was moderate TR and LVE with normal PA pressure. These are challenging cases for transcatheter versus surgical closure of VSD. The pouches were huge and there were several exit orifices (fenestrated pouch) in first case and one small exit orifice in second case. VSDs were occluded in both cases with the transcatheter method successfully.

Imaging:

Echocardiography and angiography showed large PM VSD with a large pouch. The pouches are cabbage-shaped with several exit orifices in the first case and one small exit orifice in the second case (figure 1 and 2).

Indication for intervention:

There were left ventricle enlargement.

Intervention:

VSD closure was performed with Lifetech membranous asymmetric size 6 mm in both cases. Although there were some residual VSD after the procedure, 3 weeks later follow-up echocardiography there were no residual VSD and the TR were mild.

Learning points of the procedure:

Transcatheter closure of perimembranous VSDs with a large pouch is possible when the exit orifice of pouches is small.



Figure 1: case 1, large VSD with huge pouch and several exit orifices

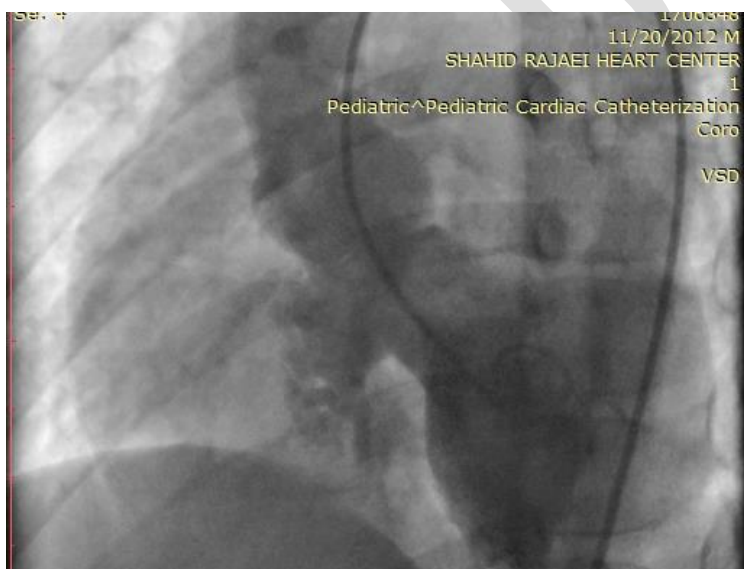


Figure 2: case 2, large VSD with huge pouch and one exit orifice