

Case of the Month

- ♦ Name of Presenter : (First Name) Sung-Min (Last Name) Ko

- ♦ Affiliation : Konkuk university hospital

- ♦ Country : Korea

Title : (in the following format : M/71, C.C: Chest pain on exercise (since 10 years ago)/ VSD history (+)

- ♦ Subspecialty : Congenital heart disease and valvular heart disease

- ♦ Classification :

- ♦ Difficulty :

- ♦ Modality : CT, MRI and Echo

- ♦ Answer : (Please describe the radiological findings in detail)

Aortic valve prolapse associated with outlet-type ventricular septal defect

Radiologic Finding:

A-C: Multiplanar reformatted CT images - Prolapse of elongated right coronary cusp (A, arrow) into the right ventricle (RV), causing failure of coaptation of aortic valve (AV) in diastole and LV enlargement. Lack of coaptation of AV (B, arrowhead) during diastole and a small perimembranous VSD (C, arrow).

D: MR image – A regurgitant jet extending from the AV into the LV during diastole (arrowhead) due to prolapse of elongated right coronary cusp into the RV (arrow) associated with outlet-type VSD.

E-G: Echo images - Perimembranous VSD (E, arrowhead), prolapsed right coronary sinus (F, arrow) with jet regurgitating into the right ventricle indicative of sinus Valsalva rupture (G, arrow).