Cranial MRI and MRA: lacunar cerebral infarction, no hemorrhage stroke or cerebrovascular malformation.

Electroencephalogram: negative

Head-up tilt test: negative

Holter: no obvious arrhythmia

No hypoglycemia was monitored in other hospital.

Computed tomography image showing the right coronary artery (RCA) arising from the left sinus of Valsalva, and RCA is between the pulmonary artery (PA) and the aorta (Ao) (Green arrow).

**Relevant catheterization findings:**

right coronary artery originate from the left sinus of valsalva, and it seemed that it was compressed by the aorta and pulmonary artery, to confirm this, we carried out IVUS.

### [Interventional Management]

**Procedural step:**

1. 6F JR 4.0 was engaged in RCA;
2. 0.014″ Runthrough wire was advanced to distal of RCA;
3. IVUS found that the proximal segment of RCA was compressed by Pulmonary artery and aorta.
4. 3.5°28mm DES was planted in the proximal segment of RCA

**Case Summary:**

1. 6F JR 4.0 was engaged in RCA;
2. 0.014″ Runthrough wire was advanced to distal of RCA;
3. IVUS found that the proximal segment of RCA was compressed by Pulmonary artery and aorta.
4. 3.5°28mm DES was planted in the proximal segment of RCA
5. Take home message:
   - Coronary artery anomaly is an unusual cause of syncope.
   - MSCT can provide 3D visualization of the artery, and may be the most promising imaging modality for diagnosing these anomalies.
   - IVUS allow dynamic change of the interarterial compression, and can provide information to PCI or CABG.
   - Surgical correction or CABG can get good anatomic and functional results.

PCI is an alternative option which is safe and effective.

### TCTAP C-147

**Saphenous Vein Graft Intervention with Bioresorbable Vascular Scaffold and Self Apposing Stents**

**Euan Leong Yew**

Sarawak General Hospital, Malaysia

### [Clinical Information]

*Patient initials or identifier number:* JH

*Relevant clinical history and physical exam:* 53-year-old man with triple vessel disease underwent coronary artery bypass grafting in 2001. He has hypertension, diabetes mellitus and hypercholesterolemia. He was asymptomatic till 2010 with episodic chest pain. Coronary angiogram showed severe triple vessel disease with patent SVG-RCA, LIMA-LAD and SVG-OM with poor distal run-off. Exercise stress test showed inferolateral ischemia at moderate workload. This was followed by an episode of hospitalisation for acute coronary syndrome. In patient coronary angiogram revealed occluded RCA with subtotally occluded SVG-RCA, patent LIMA-LAD and patent SVG-OM with poor distal run-off.

**Relevant test results prior to catheterization:**

Cardiac enzymes not raised. ECHO- moderately reduced left ventricular systolic function.

**Relevant catheterization findings:**

Left main-minor disease, 90% ostial LAD stenosis followed by occlusion in mid LAD, occluded distal RCA and proximal Lcx. SVG-RCA subtotally occluded, SVG-OM - prox 90% stenosis and distal aneurysmal disease and 80% stenosis with poor distal runoff.

**Relevant test results prior to catheterization:**

**Case Summary:**

1. AML in September 2011. We performed PCI to LAD. However he admitted for developed chest pain. We provocation Ach. We diagnosed CSA.
2. The onset of ACS in 2011. We performed PCI to LAD. However he admitted for developed chest pain. We provocation Ach. We diagnosed CSA.

### TCTAP C-149

**An Immediate Thrombosis in Right Coronary After a Stent Implantation**

**Xue Yu, Fanxi Ji**

Beijing Hospital of the Ministry of Health, China

### [Clinical Information]

*Patient initials or identifier number:* L.K Fu

*Relevant clinical history and physical exam:* A 68-year-old man was admitted with effort chest pain for 1 month and get worse in recent 2 weeks. His coronary risk factor was ten years history of diabetes, hypertension, hyperlipidemia and heavy smoking. The physical examination was normal.

**Relevant test results prior to catheterization:**

The ECG and cardiac enzymes were unremarkable. The echocardiography showed normal left ventricular systolic function (EF=65%) without regional wall motion abnormality.

**Relevant catheterization findings:**

The left coronary angiogram showed mild stenosis at ostial LM as well as ostial and mid LAD. The LCX has a intermediate stenosis in ostial part.

The right coronary angiogram showed tight narrowing of mid RCA and PL.

### [Interventional Management]

**Procedural step:**

A 6 Fr sheath was inserted through right radial artery, and the right coronary ostium was engaged with a 6 Fr SAL 1.0 guide catheter. A Whisper 0.014-inch guidewire were inserted at distal PL. Predilatation was performed with a 2.5 x 15mm Fire Star balloon at mid RCA. After predilatation, Resolute stent 2.5X14mm was directly implanted at PL. Resolute stent 4.0X15mm was implanted at mLCA. Patient complained heavy chest pain and EKG showed ST segments elevated in lead II, III and aV F. The following angiogram showed acute occlusion in mid RCA stent and thrombus was seen in the proximal part of the stent. We did the thrombus aspiration of RCA with thrombusper stent catheter for several times and a few clot was sucked out. At the same time, Tiroliban was given both through coronary and intravenous injection. Angiogram showed the blood flow back to TIMI 3 right after aspiration but still appeared hazy in the stent. Then we performed IVUS examination to identify the hazy lesion in mRCA. IVUS showed both thrombosis and dissection in the proximal vessel adjacent to the stent. Stent under-expansion was suspected. Therefore, we postdilated the stent with a 4.0-10mm Sapphire NC balloon and intended to implant another stent to cover the dissection. Unfortunately, the second Resolute 4.0X15mm stent can not get to the lesion even with buddy wire technique. Therefore, we stopped the procedure.

**Case Summary:**

After a week of intensive antithrombotic therapy, we performed the second PCI of mRCA. With deep seat AL.1.0 guide catheter and buddy wire techniques, we successfully implant the Element PROMUS 4.0X15mm stent in the mRCA overlapping the previous stent. Final angiogram showed that the procedure was successful.