Congenital Right Coronary Artery Fistula

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A congenital coronary artery fistula (CAF) is a rare identity defined as an abnormal communication between the coronary artery and either cardiac chambers, great vessels, coronary sinus or other close structures bypassing the myocardial capillary network.1 The most common symptoms and complications of CAF include fatigue, dyspnea, orthopnea, angina, endocarditis, myocardial ischaemia and myocardial infarction.2

Despite coronary angiography being the gold standard3 for the diagnosis of a CAF, echocardiography helps in localizing the orifice, course and drainage of a fistula. Multi-slice computed tomographic (MSCT) imaging along with ECG gated angiography can be very helpful in the precise evaluation of the malformation.4

Closure of the CAF is highly recommended because of the risk of endocarditis and other complications, especially as closure is safe and effective either through surgery or a transcatheter intervention.5

REFERENCES

A fifty-one year old lady with a history of dyslipidemia presented to the Royal Hospital, Muscat, Oman, with progressive exertional dyspnea and angina (Class I of Canadian Cardiovascular Society) of one year’s duration. At physical examination, a mild continuous murmur could be heard mainly at the level of the second intercostal space of the left parasternal area. The coronary angiogram showed a normal left anterior descending artery and a left circumflex artery. The right coronary artery (RCA) was dominant with no lesion, but a fistula was seen connecting the RCA to the main pulmonary artery (PA) [Figure 1].

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