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Congenital Right Coronary Artery Fistula

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الناسورالخلقي للشريان التاجي الايمن

هلال علي السبتي و مادان موهان مادالي

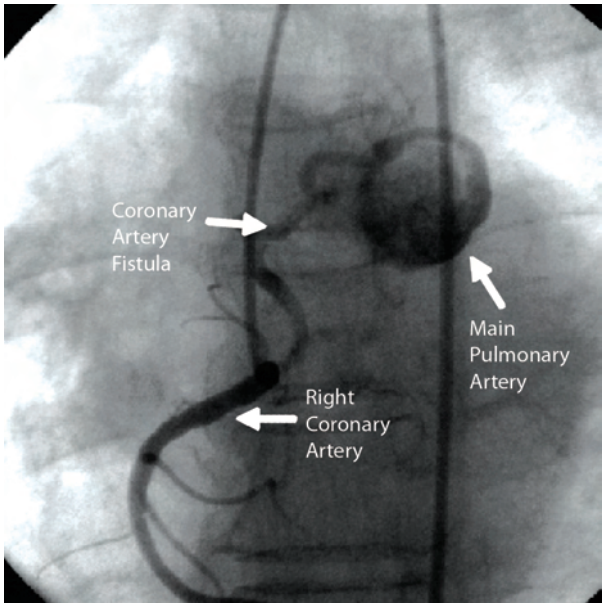

Figure 1: ***Coronary angiogram showing the coronary artery fistula (CAF) arising from the right coronary artery (RCA) to the main pulmonary artery(MPA)***

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].

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 standard[3] 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]

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