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ALCAPA (ANOMALOUS LEFT CORONARY ARTERY FROM THE PULMONARY ARTERY) SYNDROME: A CASE REPORT

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INTRODUCTION: Anomalous origin of the left coronary artery from the pulmonary artery (ALCAPA) Syndrome is a rare development anomaly of the coronary arteries. ALCAPA was first described in 1866. The first clinical description in conjunction with autopsy findings was described by Bland and colleagues in 1933, so the anomaly is also called Bland-White-Garland syndrome[1]. In 1962, Fontana and Edwards reported a series of 58 post mortem specimens that demonstrated that most patients had died at a young age[2]. There are two types of ALCAPA syndrome: infant type and adult type. Rarely, ALCAPA syndrome manifests in adults, when it may be an important cause of sudden cardiac death. The development of ECG gated MDCT coronary angiography enables accurate non-invasive imaging and direct visualization of the left coronary artery arising from the pulmonary artery.

PURPOSE: To show the value of 64-MDCT coronary angiography in diagnosis of development anomalies of the coronary arteries.

A CASE REPORT: A 54-year-old male patient with a dilatative cardiomyopathy, slight chest pain (CCS 3) left ventricular failure (NYHA III), moderate mitral regurgitation, EF 34% (Simson method) (Fig.4, 5, 6) underwent radiographic chest examination, selective coronary angiography and 64 MSDT coronary angiography. Radiographic chest examination showed enlarged cardiac silhouette. Selective coronary angiography showed aneurismatic dilated RCA with rich anastomosis net with LMA, with left-right shunt (Fig. 1, 2, 3). LMA could not be canulated from the aortic side. 64 MDCT coronary angiography showed anomalous origin of the left coronary artery arising from the pulmonary artery (Fig.7, 8, 9).

CONCLUSION: We can conclude that 64 MSCT coronary angiography can be a method of choise for easy detection of coronary development anomalies such as ALCAPA Syndrome.

REFERENCES:
1. Bland EF. Congenital anomalies of the coronary arteries: report of an unusual case associated with cardiac hypertrophy. 1933;8:787-801.
2. Fontana RS, Edwards JE. Congenital Cardiac Disease: a Review of 357 Case Studies Pathologically. WB Saunders; 1962:291.

SELECTIVE CORONARY ANGIOGRAPHY
(Canulation only of the RCA)

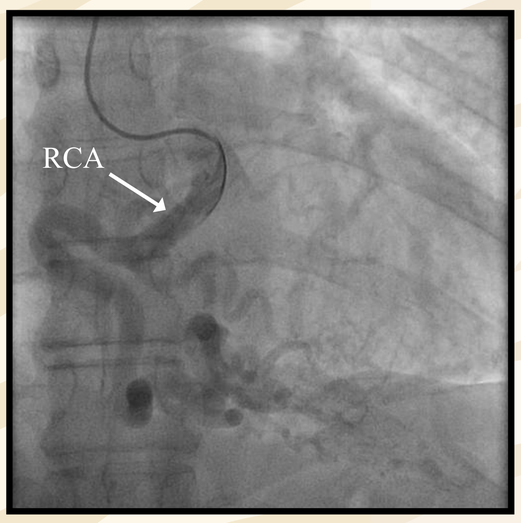

Fig.1 Aneurismatic dilated RCA

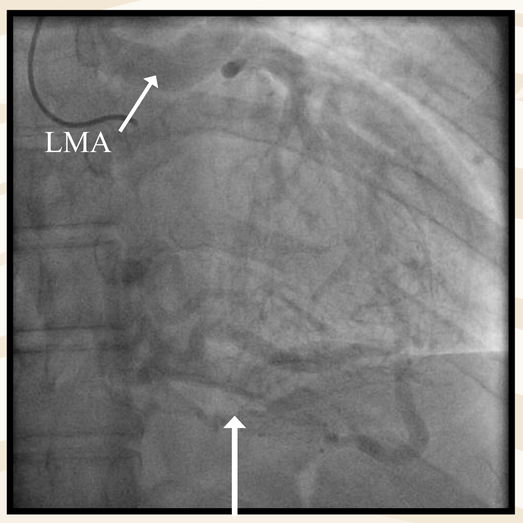

Fig.2 Rich anastomosis RCA - LMA

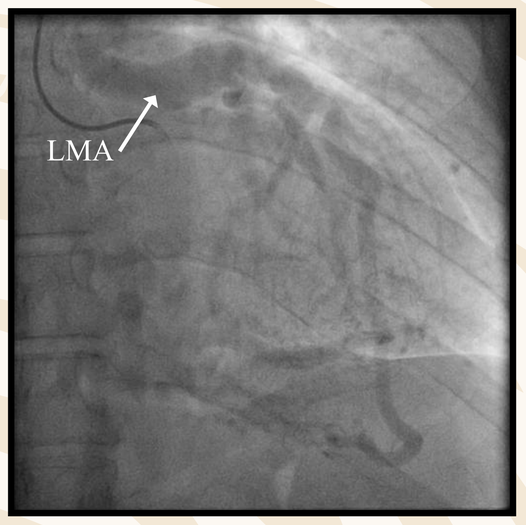

Fig.3 Right - left coronary shunt

64 MDCT CORONARY ANGIOGRAPHY

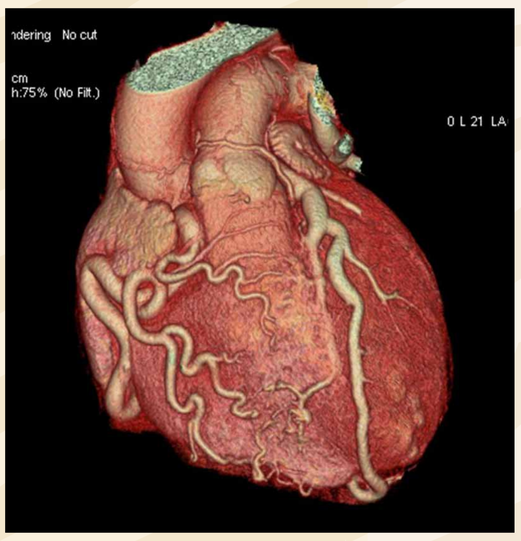

Fig.4 Dilatative cardiomyopathy

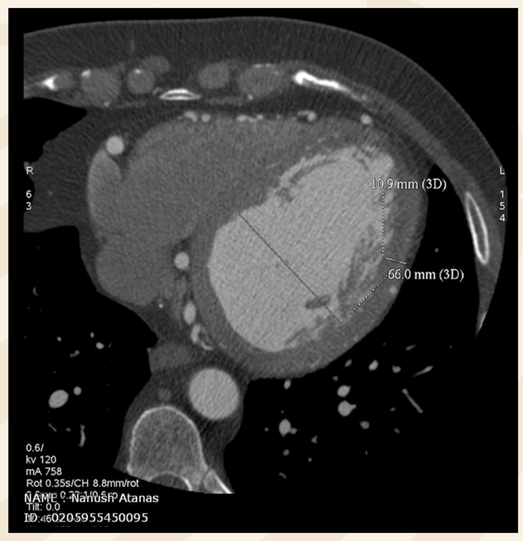

Fig.5 Left ventricular failure

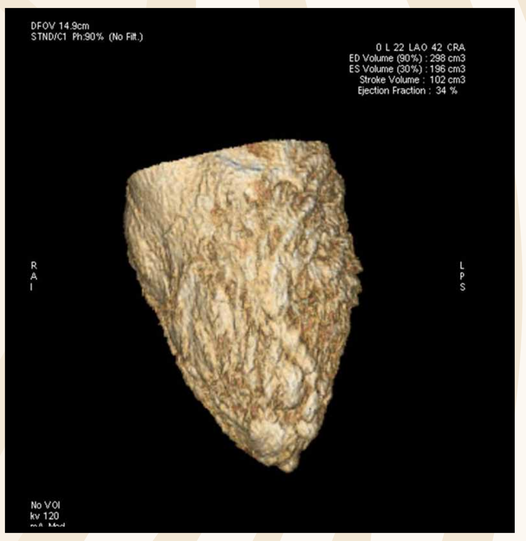

Fig.6 EF:34%

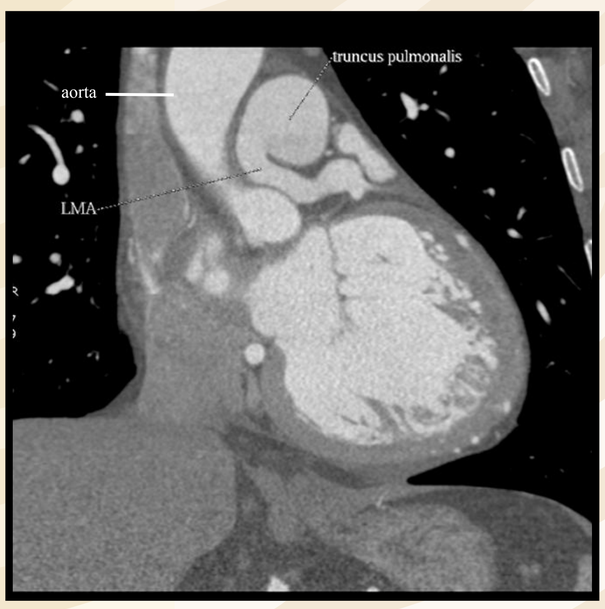

Fig.7 Anomalous origin of the left coronary artery from the pulmonary artery

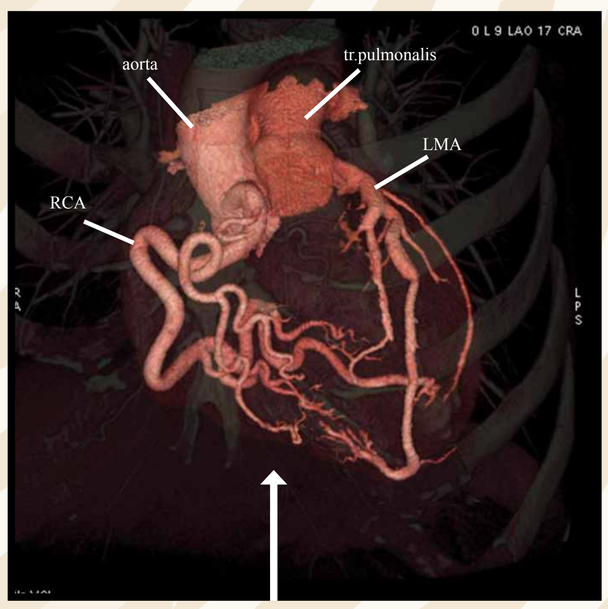

Fig.8 Rich anastomosis between RCA & LMA

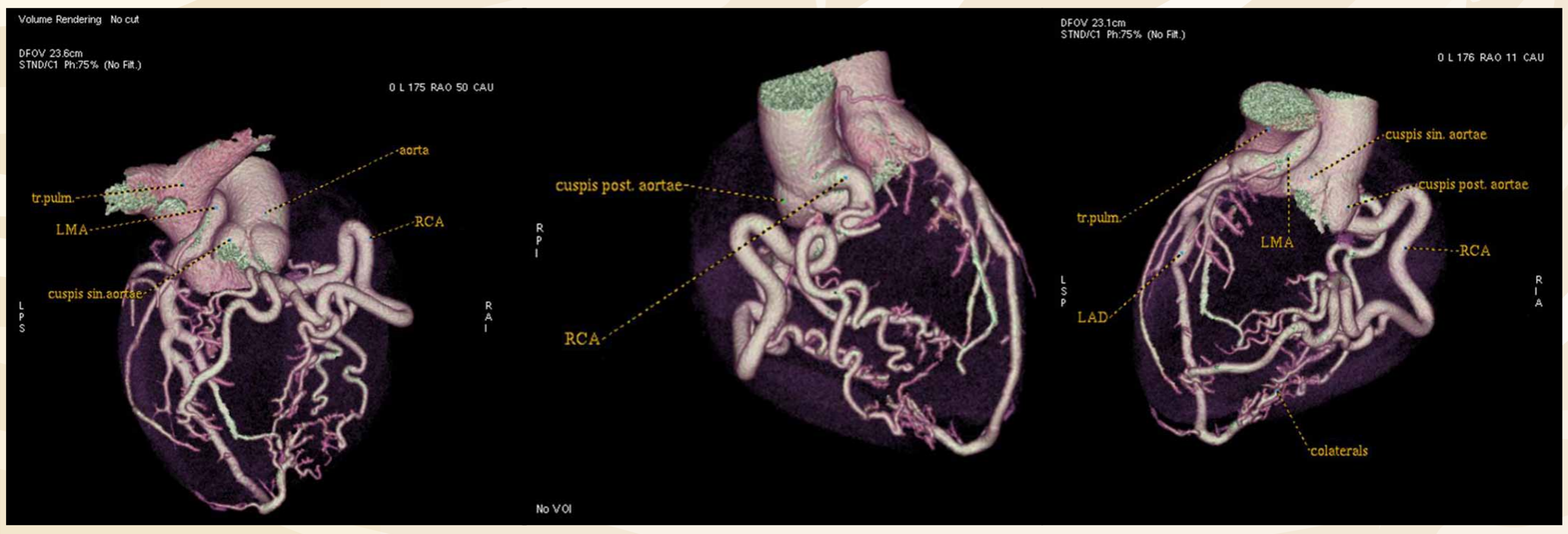

Fig.9 ALCAPA SY