



CORONARY FISTULAS: ABOUT TWO CASES

M. Chtioui*

Head of Cardiology, Oued Eddahab Military Hospital, Souss-Massa University Hospital, Agadir *Corresponding Author

M. E. Cherradi

Cardiologist, Oued Eddahab Military Hospital, Souss-Massa University Hospital, Agadir

I. Meziane

Cardiologist, Oued Eddahab Military Hospital, Souss-Massa University Hospital, Agadir

KEYWORDS : Coronary; Fistulas; Congenital**INTRODUCTION**

Coronary fistula is a rare vascular malformation, a connection in which the involved coronary artery empties inside a heart cavity (coronary cameral fistula), in the systemic circulation or in the pulmonary artery (coronary pulmonary fistula), short thus circuiting the myocardial capillary bed. It is a rare and usually isolated anomaly whose exact incidence is always Unknown. The majority of these fistulas are congenital in origin, but can also be detected during coronary angiography or complicating heart surgery. They can remain asymptomatic for a long time, especially if they are small. However, the frequency of Symptoms and complications may increase with age.

Observation 1

The patient is a 68-year-old woman with cardiovascular risk age and menopause, having undergone a axillary artery bypass grafting by vein graft 47 years ago for TAKAYASHU disease. Admitted for Chronic Coronary Syndrome dating back to 03 months, associated with NYHA stage II dyspnea progressive deterioration to stage III.

Clinical examination finds a patient with conditions normal hemodynamics. On cardiac auscultation, B2 burst At the pulmonary focus, there is no pericardial friction.

No signs of left or right heart failure. Presence with a straight carotid breath. The peripheral venous network is without anomaly. Pulmonary auscultation is clear, with the presence of some expiratory sibilants. The remainder of the clinical examination is without any special features.

The electrocardiogram records a regular sinus rhythm, with a ventricular rate of 71/min, normal axis of the heart, not elongation of the PR space, presence of a straight branch block incomplete, fine QRS complex, no repolarization disorder.

Transthoracic echocardiography was performed, objectifying good left ventricular function, with systolic function conservée, notamment pas de troubles de la cinétique segmentaire ou globale. Les oreillettes sont de tailles normales. Le ventricule droit n'est pas dilaté.

Coronary angiography (Figures 1 and 2) shows the presence of Coronary pulmonary fistula in the circumflex artery communicating with the left pulmonary artery.



1 **2**
Figure 1 and 2: Coronary angiography showing a coronary pulmonary fistula

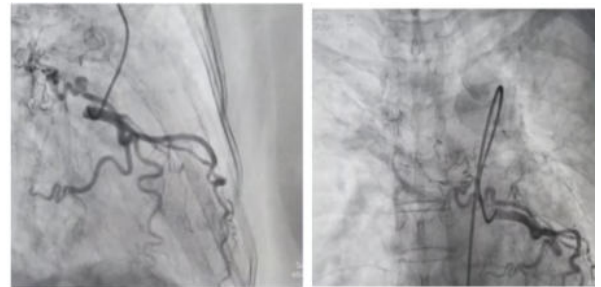
OBSERVATION 2

The patient is a 70-year-old patient with cardiovascular risk apart from age and male sex, a Always active smoking, being overweight. Without others Notable pathological history. Admitted for disabling angina evolving for 01 month. Clinical examination finds a patient who is stable in terms of hemodynamics and respiratory. The cardiovascular examination is found at auscultation of well-perceived, regular, breathless heart sounds or other superimposed noises. Absence of signs of insufficiency right and left heart rate. The carotid axes are permeable. The Peripheral venous network is abnormal-free Auscultation Pulmonary is clear, vesicular murmur is symmetrical. The rest of the clinical examination is free of abnormalities.

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The electrocardiogram records a regular sinus rhythm, a Ventricular rate at 59/min, left axis of the heart, step prolongation of the PR space, no arrhythmias or conduction, repolarization is normal. Transthoracic echocardiography objectified a ventricle left with preserved systolic function, with no kinetic disturbance segmental or global. The right ventricle is not dilated, and the earbuds are normal sizes.

Coronary angiography (Figures 3 and 4) shows the presence of coronary cameral fistula at the interventricular artery middle anterior draining into the left ventricle.



3 **4**
Figure 3 and 4: Coronary angiography objectifying a coronary fistula

DISCUSSION:

Of all the anomalies of the coronary arteries, the coronary fistula is a rare vascular malformation, classified as an anomaly of termination. Its incidence is estimated between 0.1 and 0.2% of all patients who have had coronary angiography. [1]

From an anatomical point of view, coronary fistulas most often arise from the right coronary artery in approximately 50% of patients, of the left coronary artery in 42% of patients and both coronaries in 8% of

patients. More than 70% drains into the heart right, with in order of frequency: the right ventricle, the right atrium, and the pulmonary artery. [2] Patients are most often asymptomatic, sometimes they can complain of dyspnea on exertion, palpitations, angina-like pain. In the most forms disabling or the shunt is large, potential complications can cause congestive heart failure, pulmonary arterial hypertension, infective endocarditis, in addition, ruptures, thromboses or aneurysms specific to the fistula, is always associated with a degree of ischemia by limitation of coronary flow. The natural evolution is not known, it depends on of the diastolic pressure gradient between the coronary bed and the recipient cavity, on the one hand, and the compensatory mechanisms, on the other hand, including the progressive dilation of the ostium and the segment of the artery concerned. [3]

Although non-invasive imaging can aid diagnosis by identifying the origin and insertion of fistulas, coronary angiography remains the reference examination for the precise delineation of the anatomy of the coronary fistula by highlighting the artery concerned, the fistulous tract and drainage site. It is also necessary for the assessment of hemodynamics and to show the presence concomitant atherosclerosis and/or other structural abnormalities. [2]

Concerning the treatment, it seems that the fistulas must be closed, the therapeutic modalities are not entirely defined. More generally, if fistulas are symptomatic, they must be treated, however, there is no consensus concerning the monitoring and treatment of asymptomatic fistulas. [2]

CONCLUSION :

The increase in additional examinations and coronary angiographies in particular reveals a new class of coronary anomalies, fistulas. If they are small and asymptomatic there is no need to treat, without there being a real consensus. However, if the fistulas are not left untreated, they are responsible for serious cardiovascular events.

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