Prezentare de caz

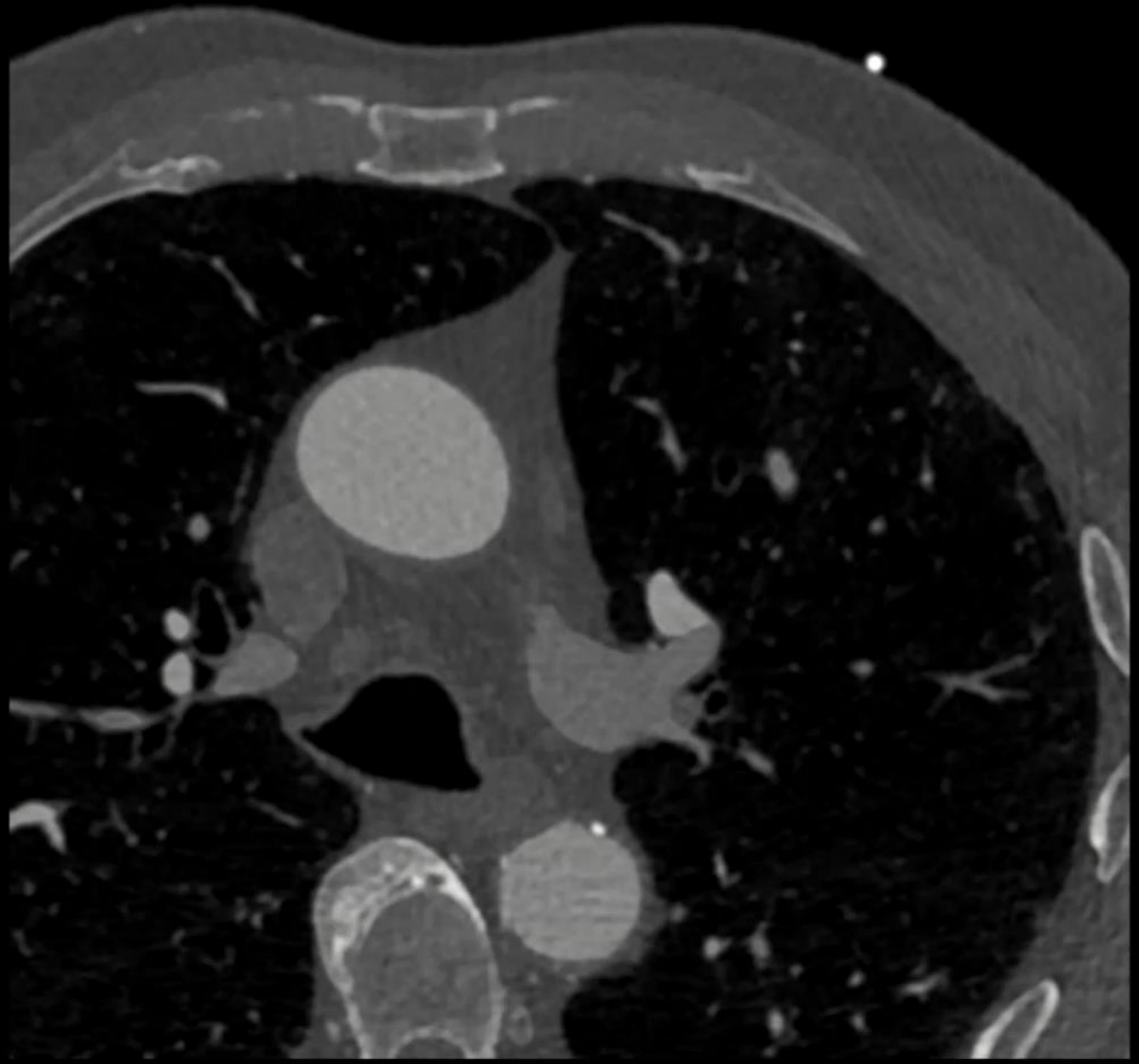
Andrei Epure

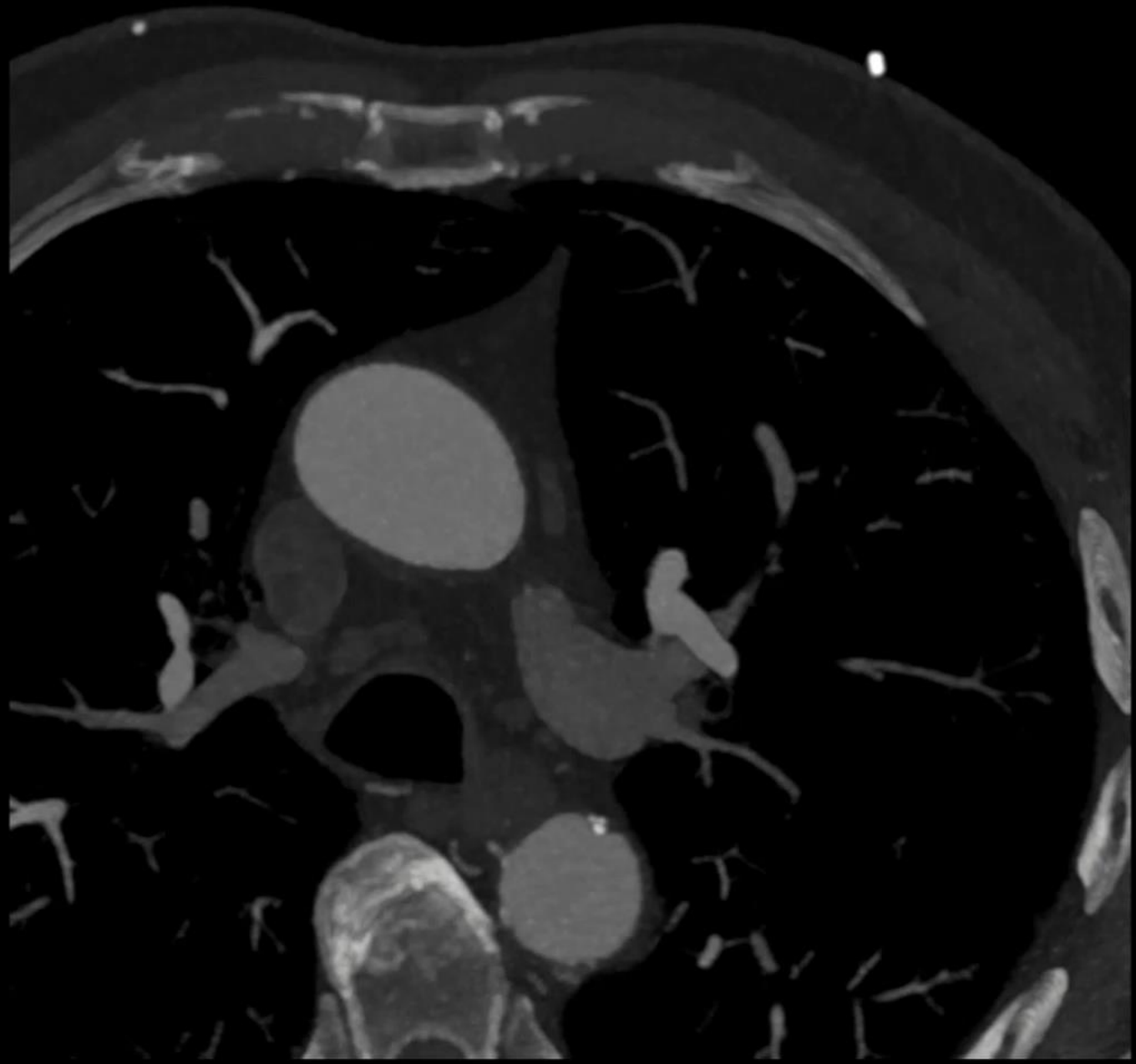
Medic rezident an V

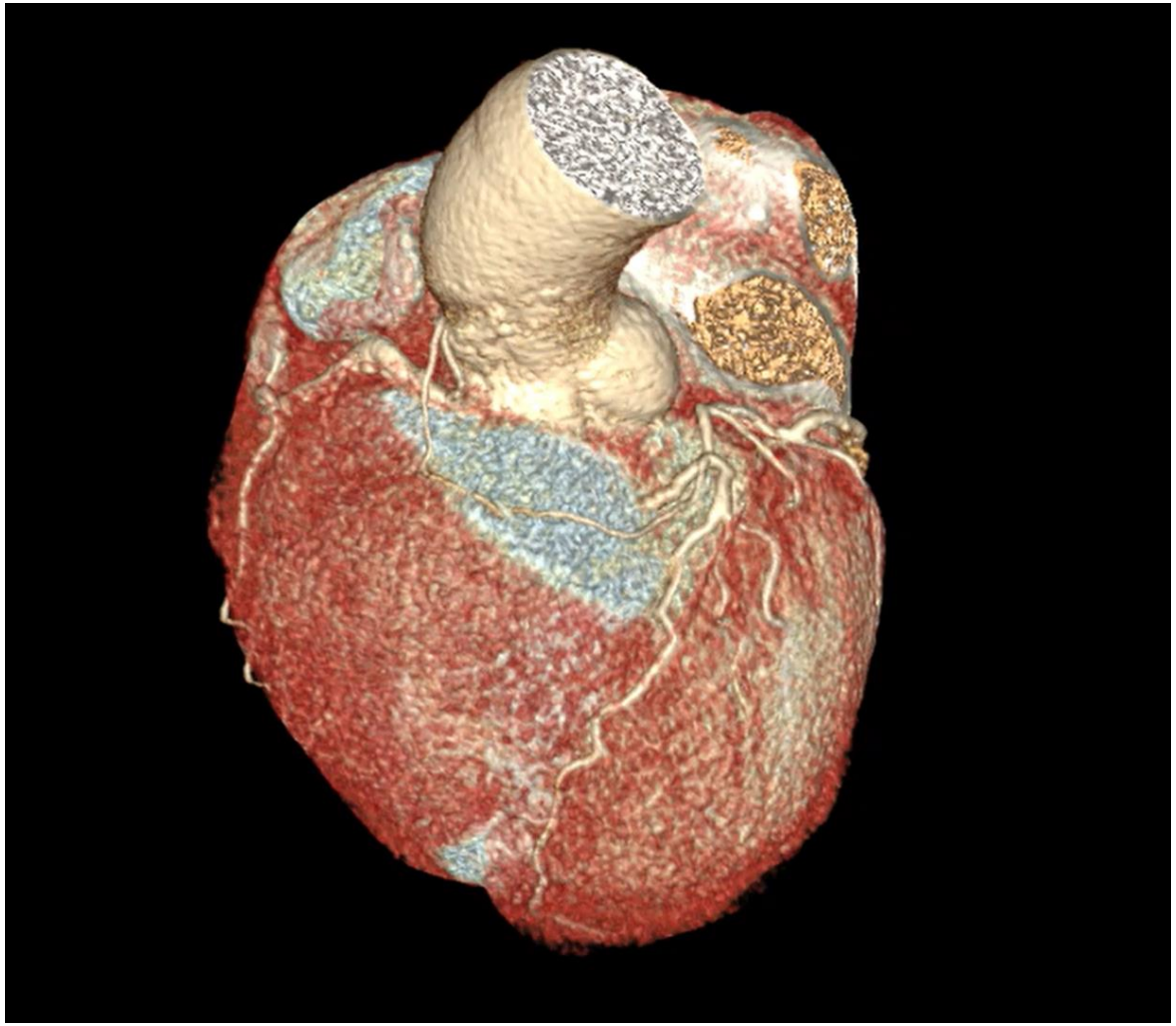
- B, 75 ani;
- Diagnostic de trimitere: boală cardiacă ischemică;
- Angină pectorală la efort, fără modificări EKG sau ecocardiografice;

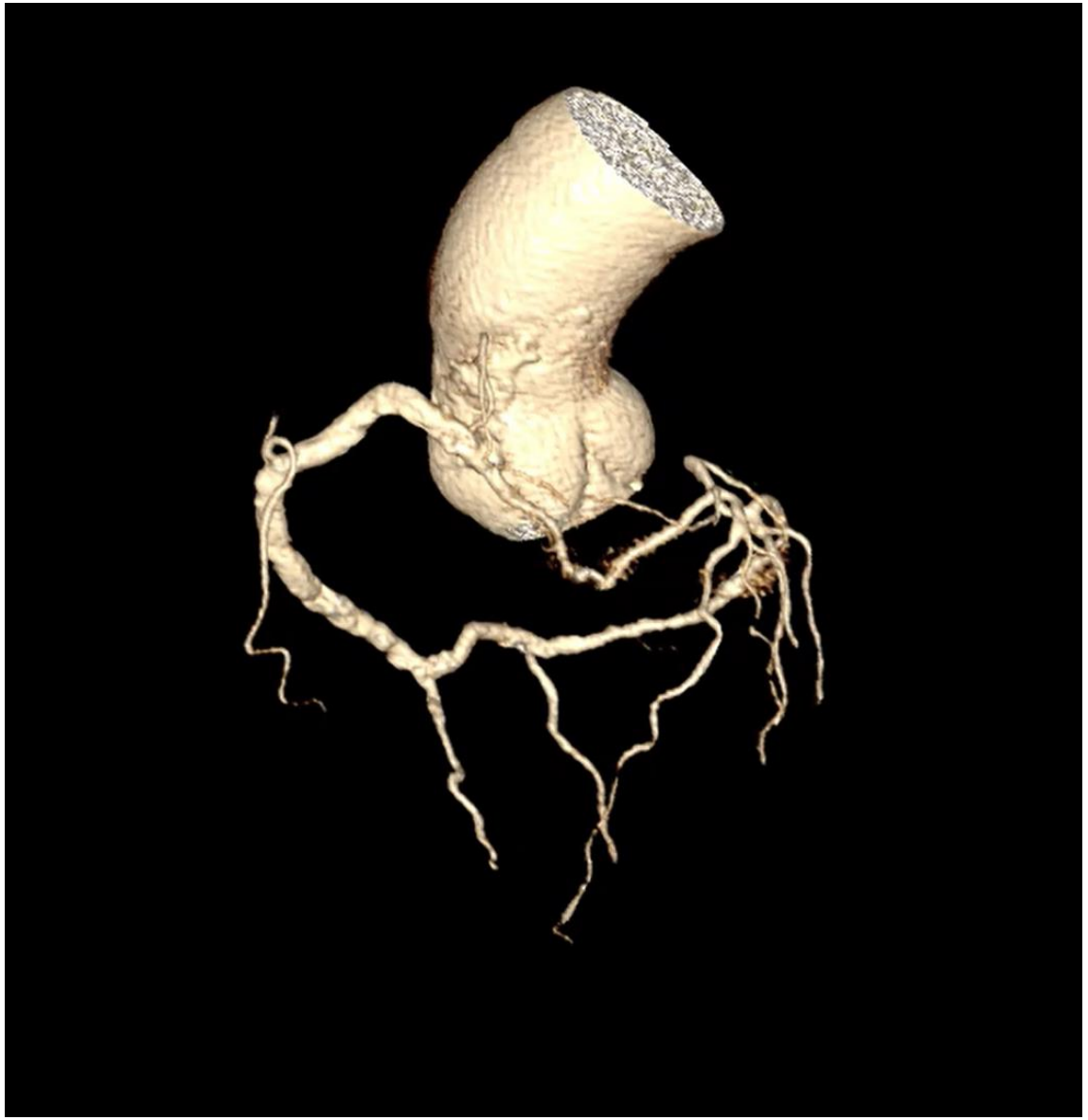
Artery	Lesions	Volume / mm³	Equiv. Mass / mg	Score
LM	1	35.7	6.95	44.9
LAD	1	18.0	4.78	30.8
CX	2	38.0	9.11	49.3
RCA	9	2942.7	722.77	3711.4
Ca	0	0.0	0.00	0.0
Total	13	3034.5	743.61	3836.3
U1	0	0.0	0.00	0.0
U2	0	0.0	0.00	0.0

Settings
Score Type: Agatston equivalent, Threshold: 130 HU (105.3 mg/cm³ CaHA)
Mass calibration factor: 0.81

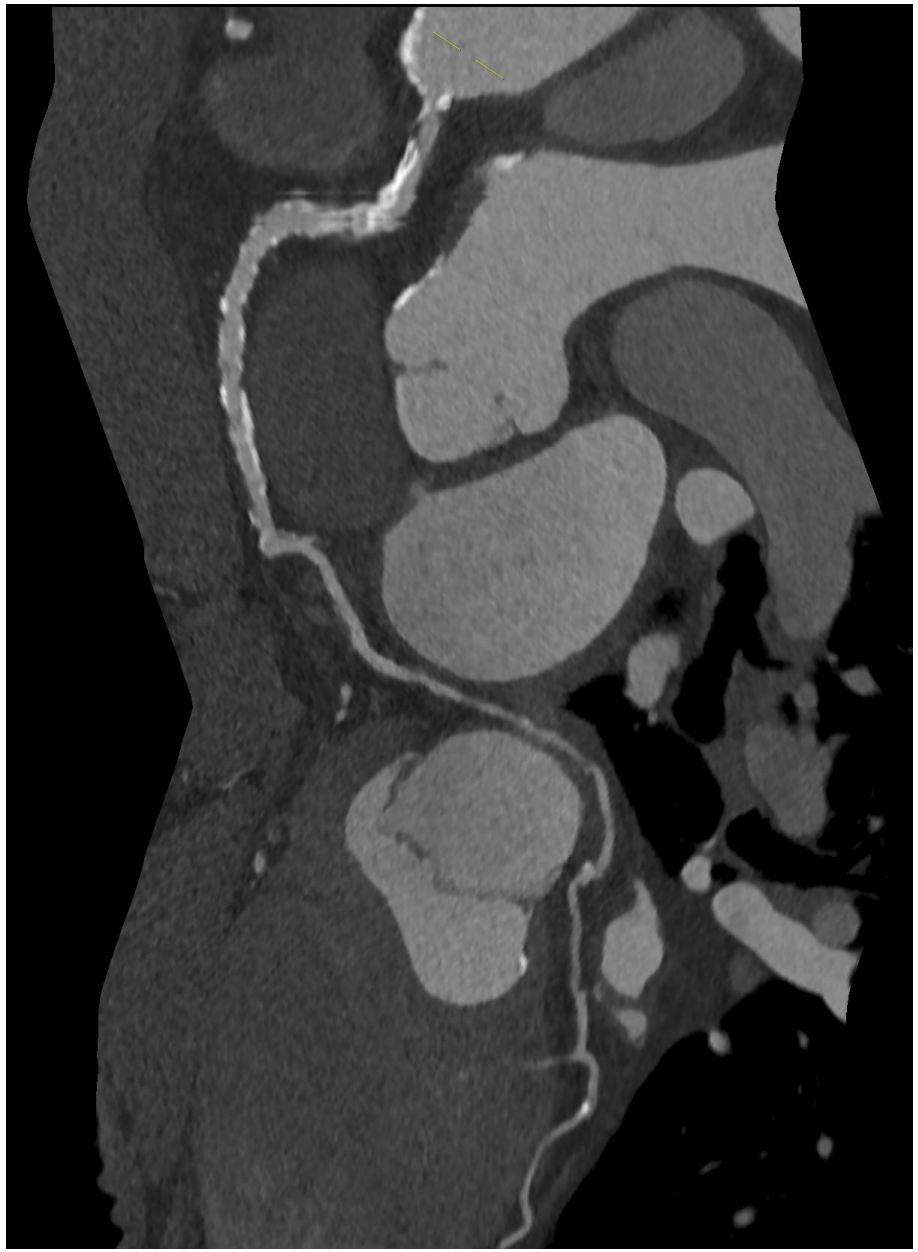




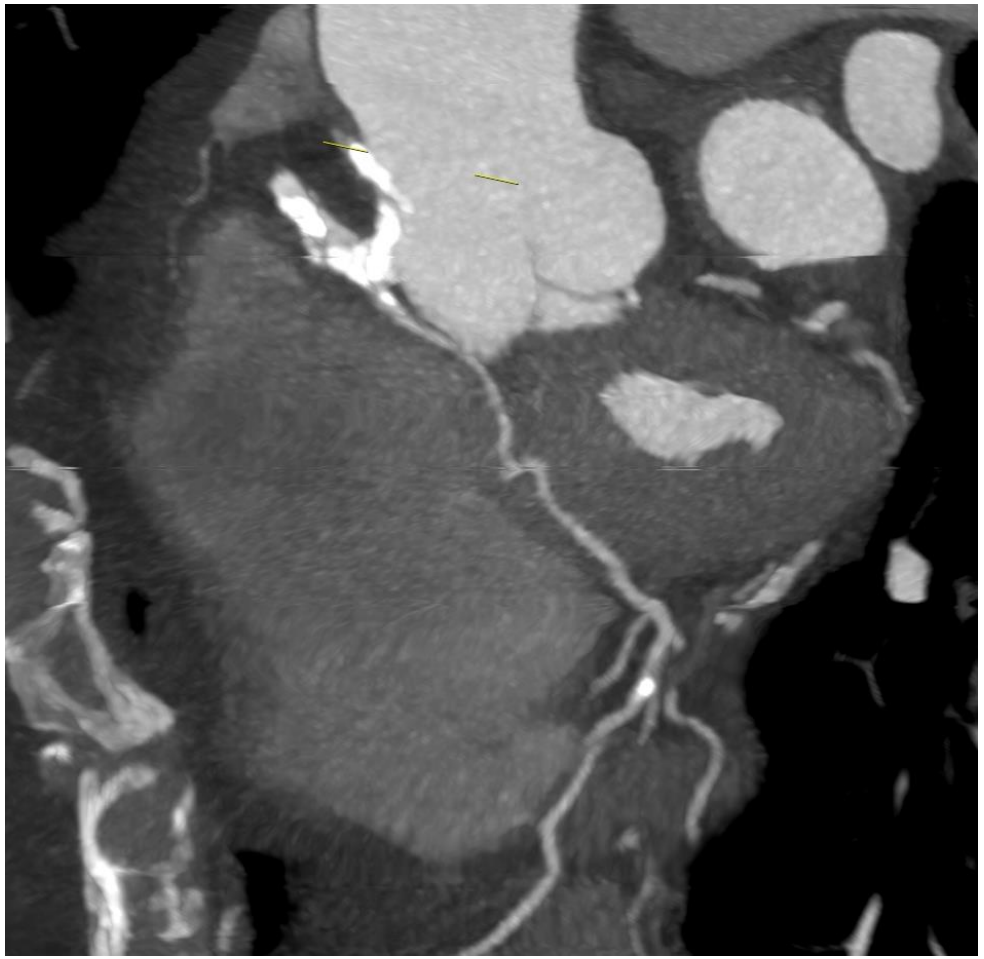




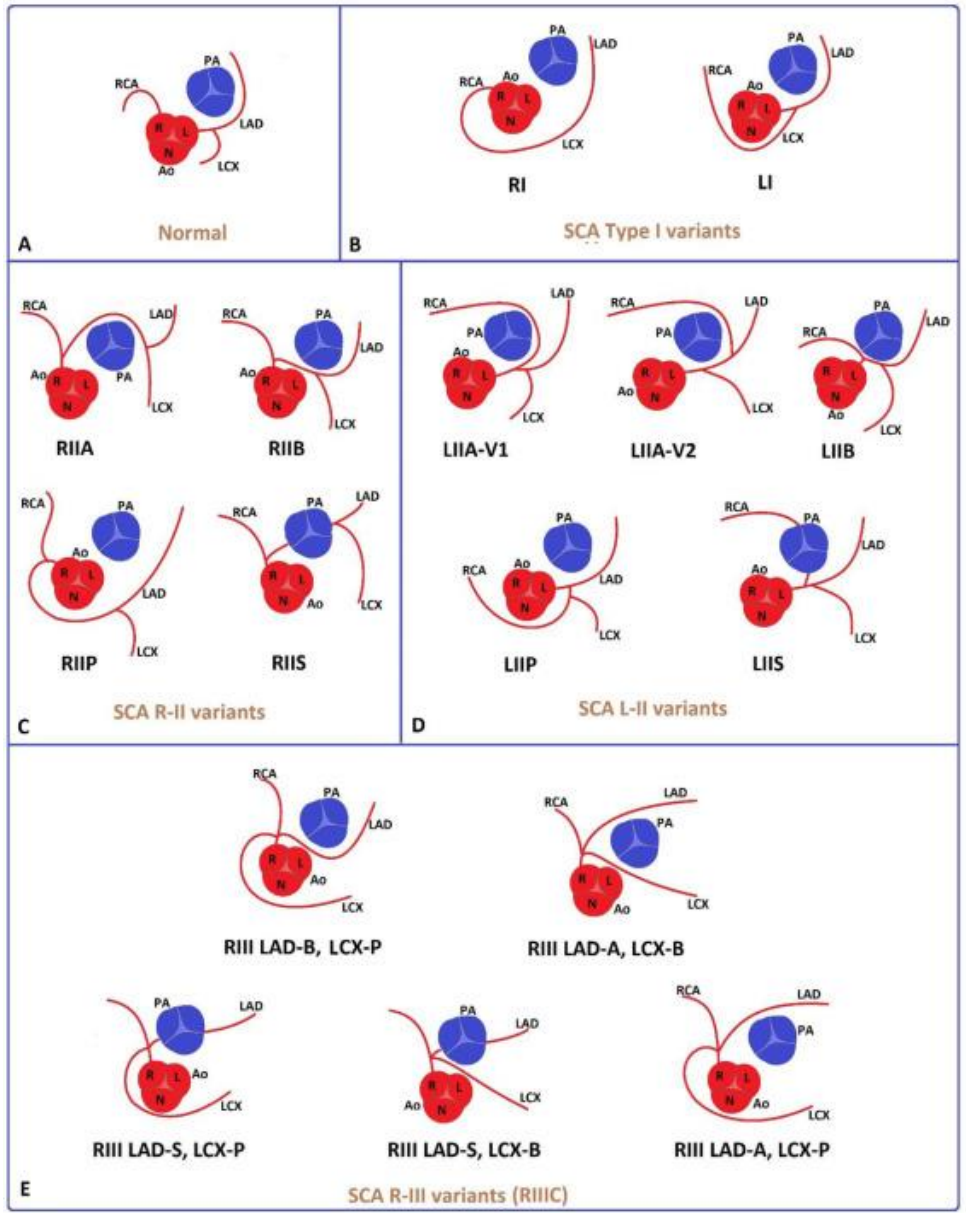
Artera coronară dreaptă



Trunchi coronarian stâng

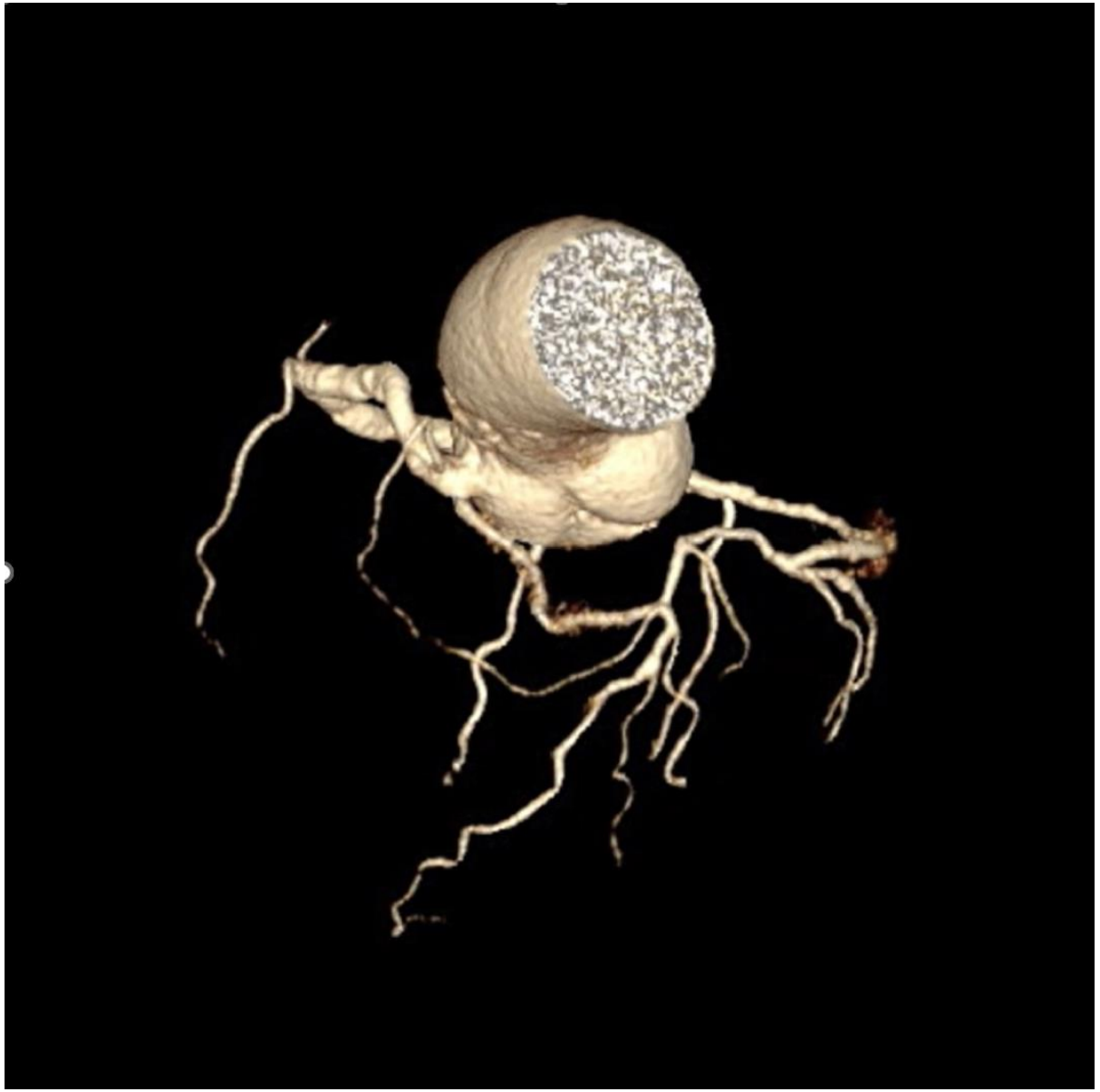


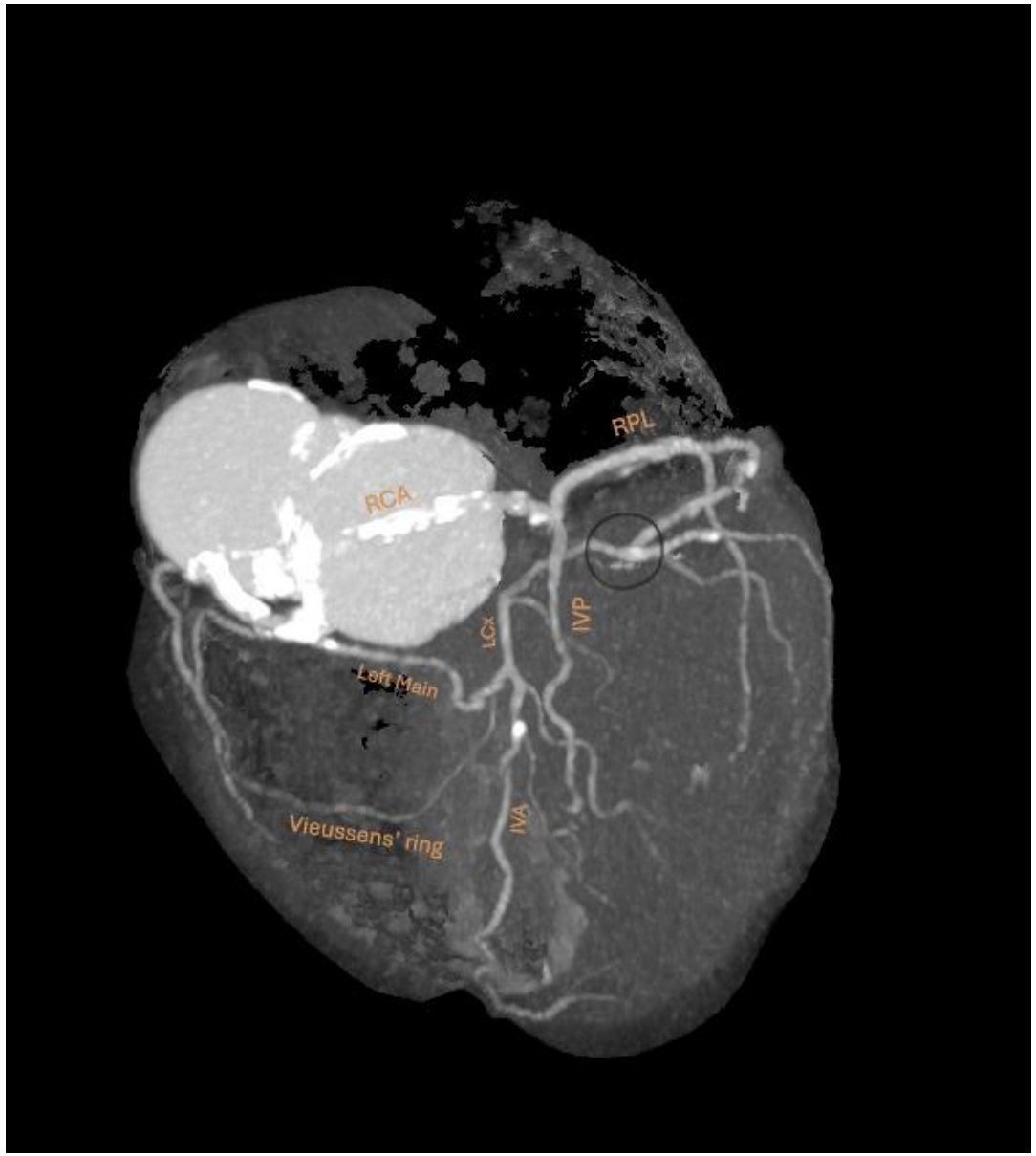
Clasificarea Lipton-Yamanaka a arterelor coronare unice



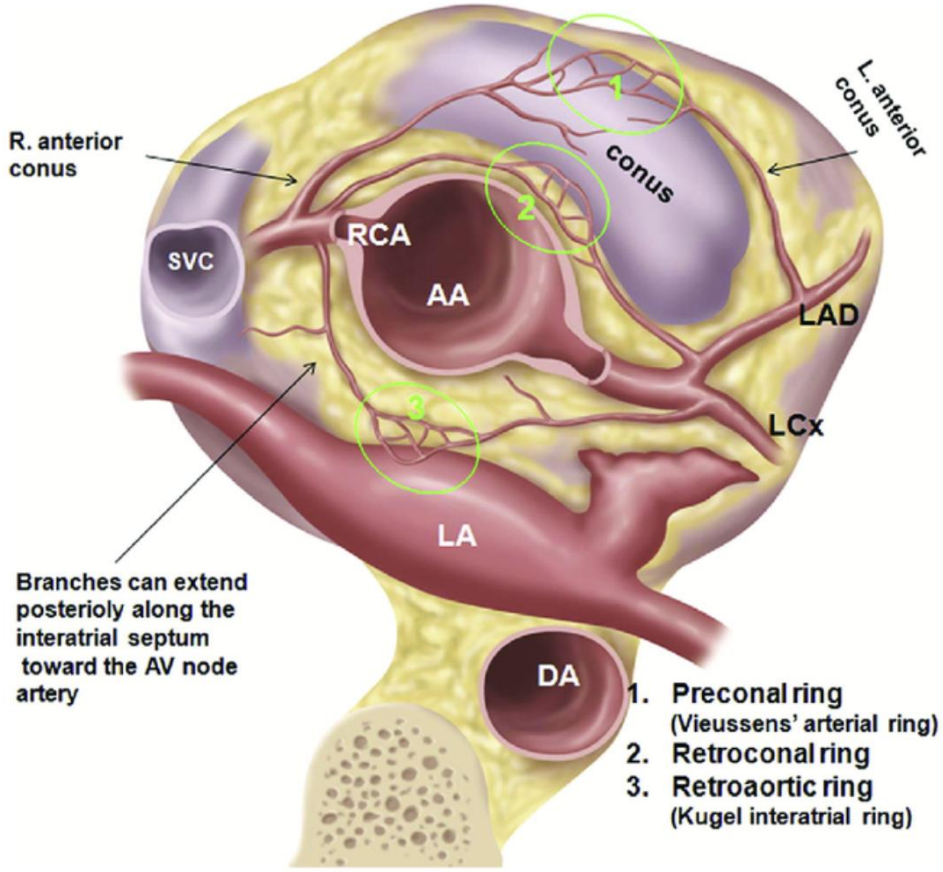
See for:	Finding:	Code:	
Origin of SCA	Right coronary sinus		**R**
	Left coronary sinus		**L**
Branching pattern	Single dominant artery following the course of either RCA or LCA-LAD	**I**	**RI:** Single RCA continuing in left atrioventricular groove to become LCX and terminate as LAD **L1:** LCA is dominant with RCA arising from LCX
	Normally located one coronary artery gives another coronary artery by early branching (ie, from proximal aspect)	**II**	**RII:** LCA branches from RCA originating at right coronary sinus **LII:** RCA branches from LCA originating at left coronary sinus
	Absent LCA with RCA, LAD and LCX branching from SCA at right coronary sinus		**III**
Course of transverse artery	Anterior to pulmonary artery		**A**
	Inter-arterial course		**B**
	Posterior to aorta		**P**
	Trans-septal course through interventricular septum		**S**
	Combination of diverse routes		**C**

LAD, Left anterior descending artery; LCA, Left coronary artery; LCX, (Left) Circumflex artery; RCA, Right coronary artery; SCA, Single coronary artery.

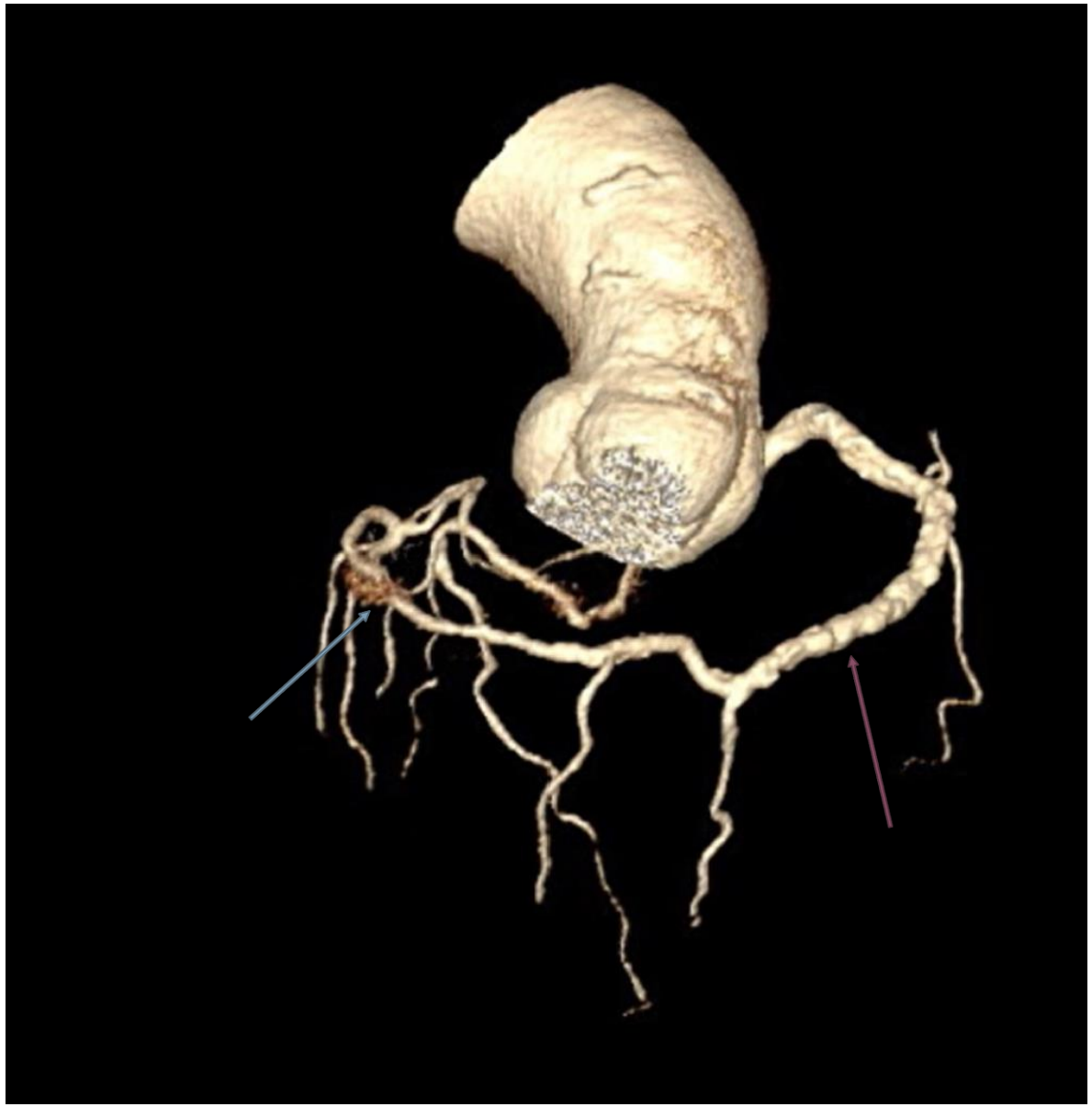



RPL
RCA
LCx
IVP
Left Main
Vieussens' ring
IVA

Anastomozele inter-/intracoronariene



An anatomic representation of the coronary anastomotic rings. The more commonly known Vieussens' arterial ring (#1) travels anterior to the aorta to form a preconal ring connecting left and right coronary circulations. In contrast, Kugel's artery (#3) travels posterior to the aorta and may connect the right to the left or distal right circulations. Rarely, this may be seen as a single collateral vessel described by Kugel as "arteria anastomotica auricularis magna." Reproduced with permission from Saremi et al.[1] AA = ascending aorta; AV = atrioventricular; DA = descending aorta; LAD = left anterior descending coronary artery; LCx = left circumflex coronary artery; RCA = right coronary artery; SVC = superior vena cava.



Arcadă coronariană: imagine 3D a inelului vascular format prin anastomoza dintre artera coronară dreaptă (RCA) (săgeata roşie) şi artera circumflexă (săgeata albastră)

Intercoronary communication: a rare coronary anomaly

Seenu Prasanth Adimoulame, Anand Palakshachar, Rangaraj Ramalingam, Nagaraja Moorthy & Anushree Kumbhalkar

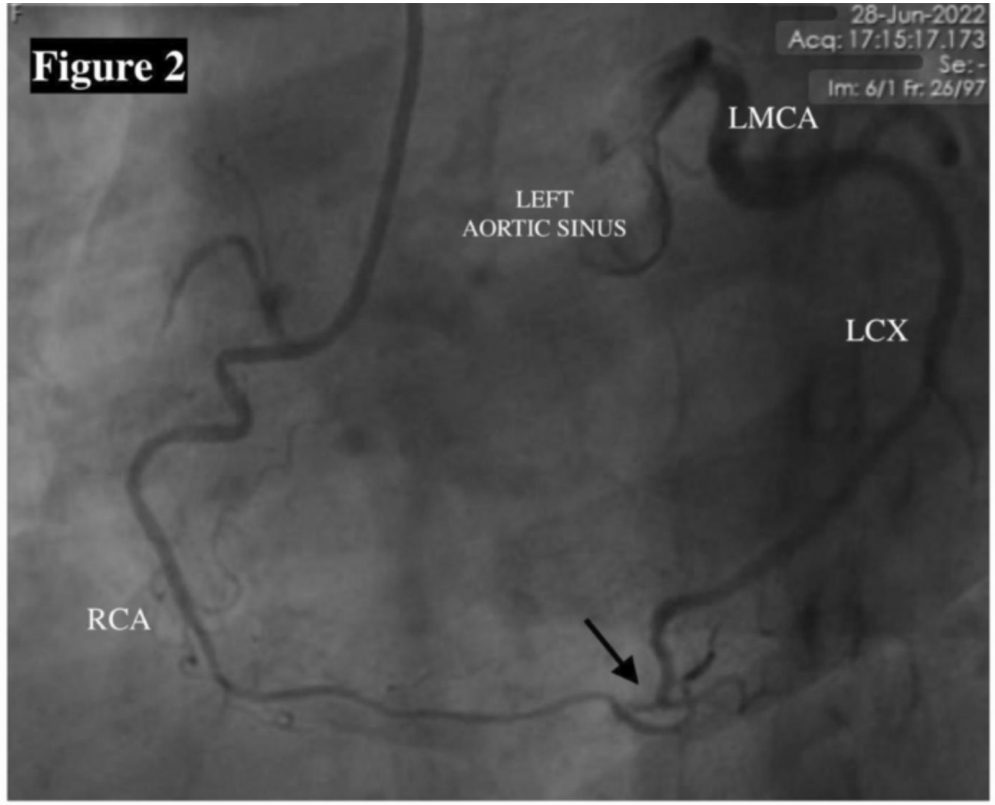
The Egyptian Heart Journal **76**, Article number: 142 (2024) | Cite this article

Table 1 Differentiation between collateral vessel and intercoronary communication

From: Intercoronary communication: a rare coronary anomaly

Collateral vessel	Intercoronary communication
Associated with proximal obstructive lesion	No evidence of proximal obstruction
Usually multiple	Usually single
Course is tortuous and twisted	Usually straight
Size is less than 1 mm	Large caliber
Histology: Composed of endothelium supported by poorly organized collagen, muscle and elastic fibers	Histology: Similar to epicardial vessel with a well-defined muscular layer

The prevalence of coronary artery anomalies in routine angiographic series is 0.3–1.3%. One such rare anomaly is intercoronary communication, also known as coronary cascade or coronary arcade, which has an incidence of only 0.002% .It is thought that a fault in the embryologic development contributed to the persistent existence of the intercoronary channel.



Coronary angiography of RCA in LAO view showing co-dominant RCA. There is an abnormal channel (arrow) connecting the right posterolateral branch to the distal LCX causing retrograde filling of LCX up to LMCA and left aortic sinus

Concluzii

- Arteră coronară unică din sinusul coronarian drept, cu scurt trunchi comun din care emerg a. coronară dreaptă şi o ramură corespunzătoare TCS:
  - ACD cu traiect fiziologic, cu anastomoză intracoronariană RPL-Acx (“arcadă coronariană);
  - TCS hipoplazic, cu traiect intramiocardic profund, în septul bazal VS, din care emerg la nivelul spaţiului epicardiac interventricular anterior bazal – IVA şi ACx
  - Anastomoză intracoronariană între a. conului şi segmentul distal, epicardic, al TCS – inel Vieussens
  - Tip R – II – S conform clasificării Lipton Yamanaka

  - Stenoză severă >70% în segmentul proximal al arterei coronare unice
  - -> CAD-RADS 2.0: 4B/P4/E
- Diagnostic diferenţial:
  - Atrezie TCS – în cazul absenţei complete a TCS; extrem de rar descoperită la adulţi; pacienţii dezvoltă frecvent colaterale intercoronariene; necesită evaluare hemodinamică angiografică pentru evaluarea unor umpleri retrograde.

Vă mulțumesc!