

DIU cardiologie interventionnelle
année universitaire 2025-2026

Anomalies coronaires congénitales (ANOCOR) classification

Pierre Aubry
Hôpital Bichat, Paris 75018
Centre Hospitalier, Gonesse 95500

ANOMALIES CORONAIRES CONGENITALES

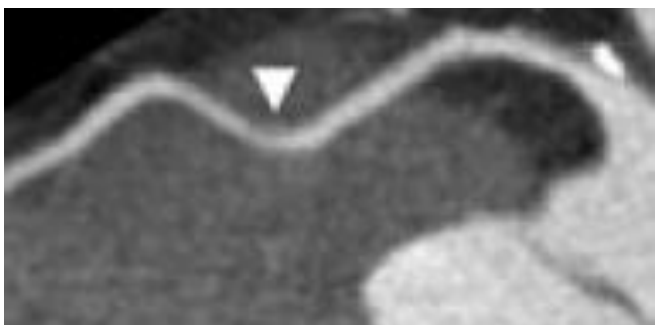


Origine



Connexion anormale

Trajet



Pont musculaire

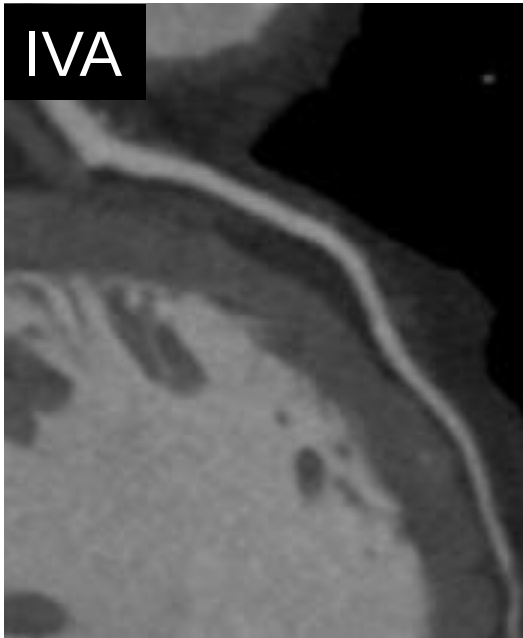
Terminaison



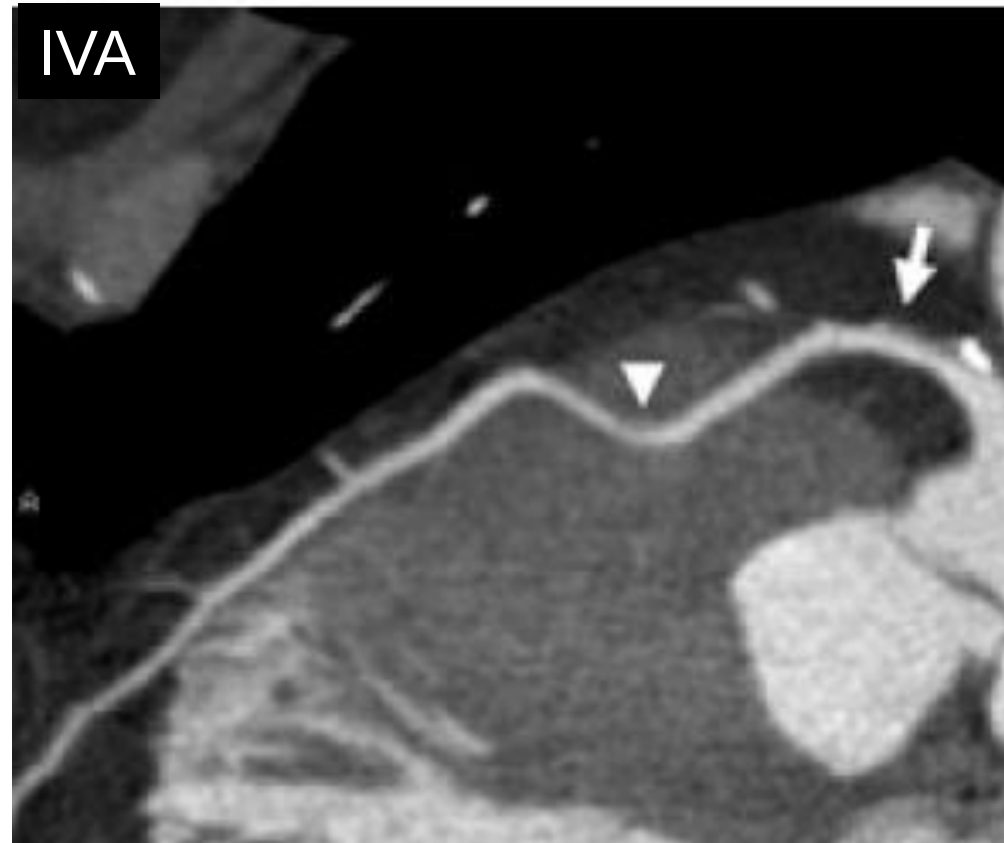
Fistule

- Anomalies sur le trajet
- Anomalies de terminaison
- Anomalies de connexion

Trajet coronaire intramyocardique



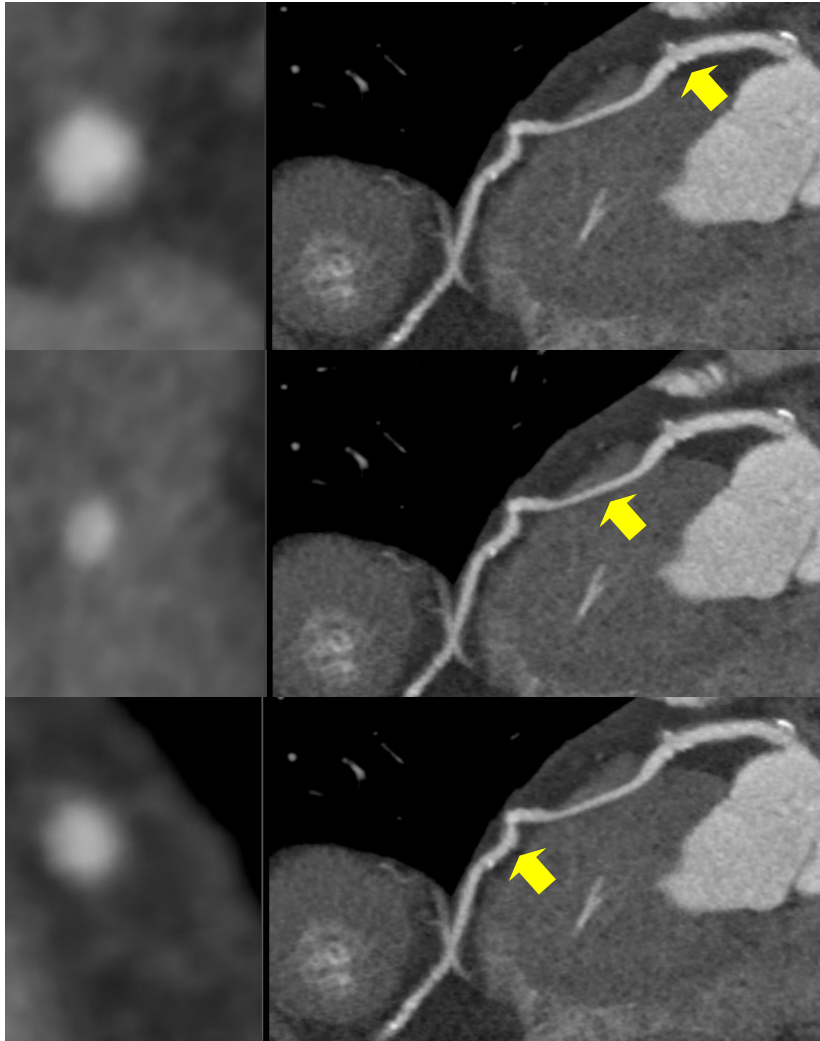
Trajet normal



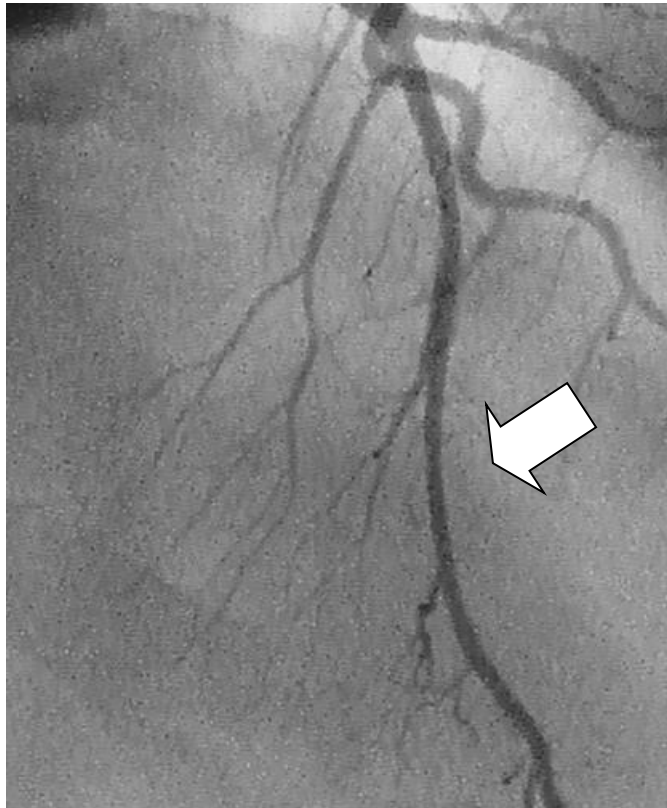
Pont musculaire

- coronarographie 5%
- scanner coronaire 20%
- IVA moyenne 95%

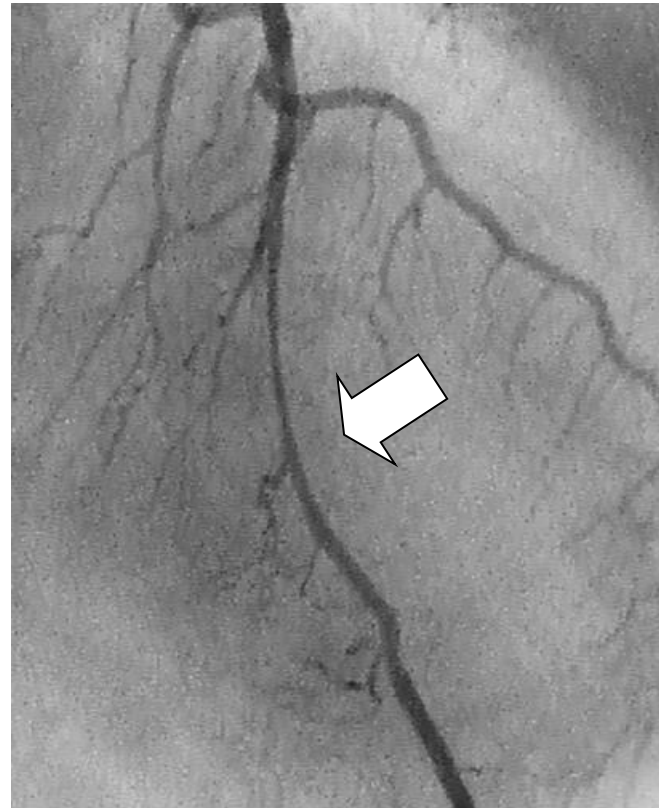
Trajet coronaire intramyocardique



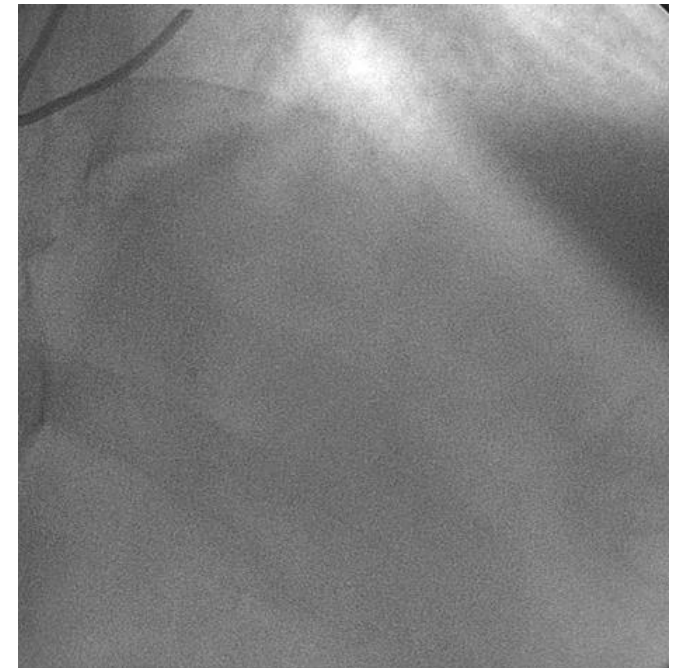
Trajet coronaire intramyocardique



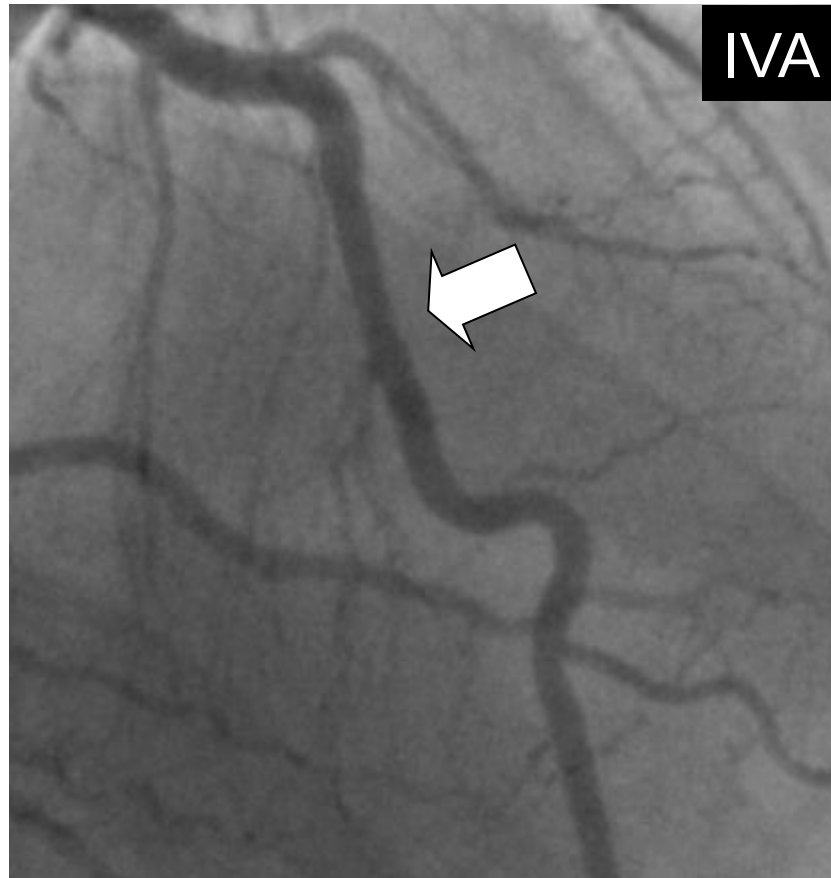
diastole



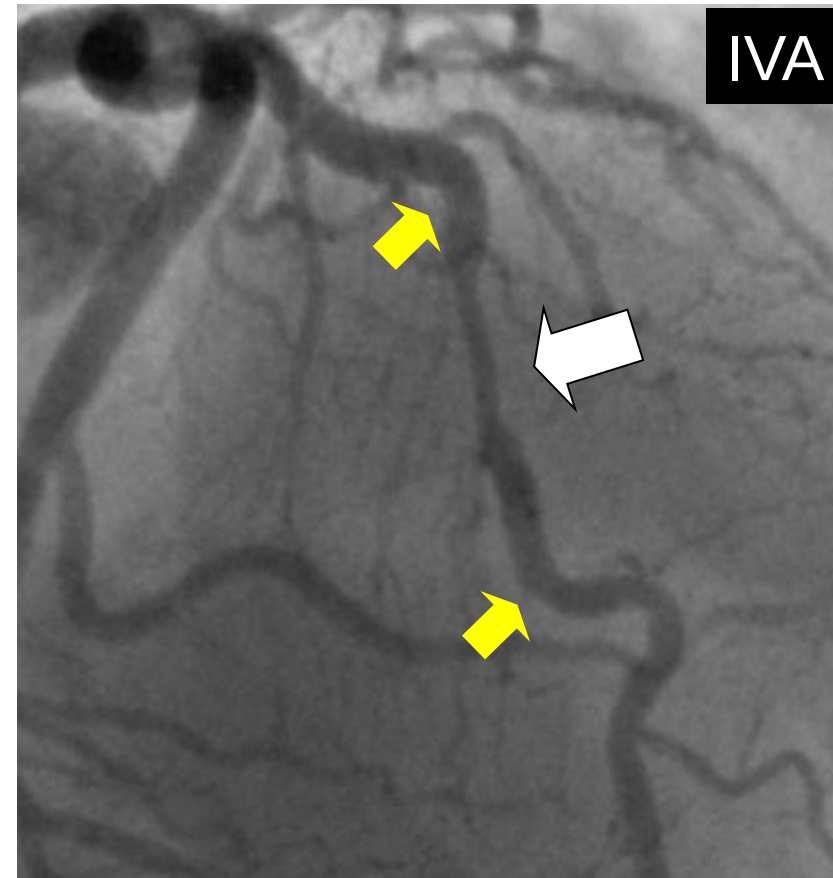
systole



Trajet coronaire intramyocardique

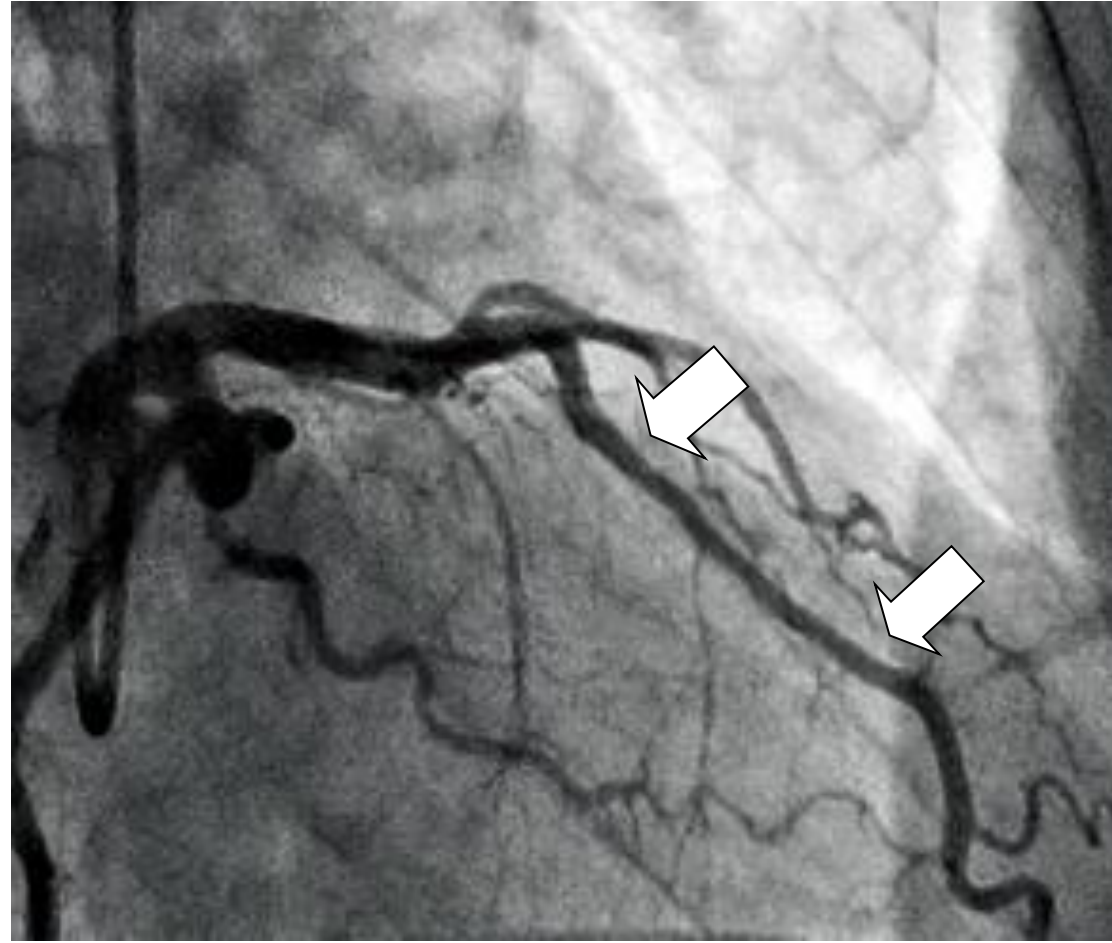
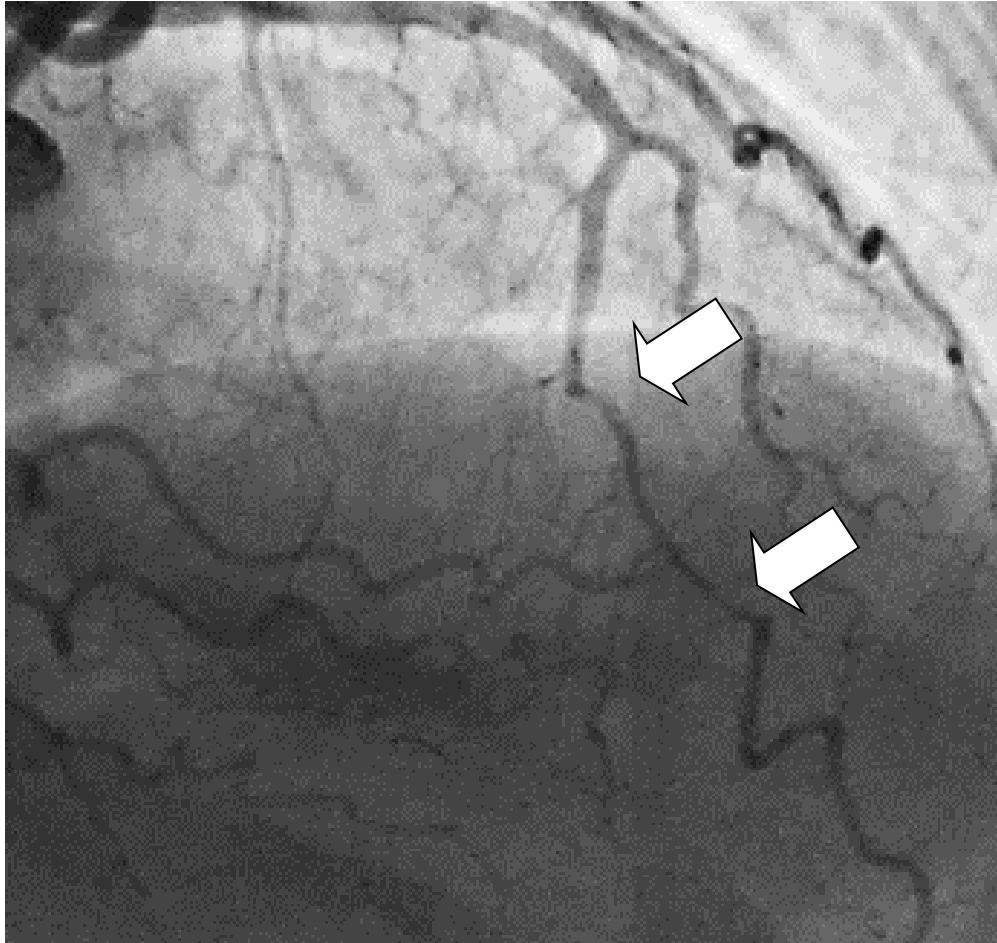


Systole avant nitré



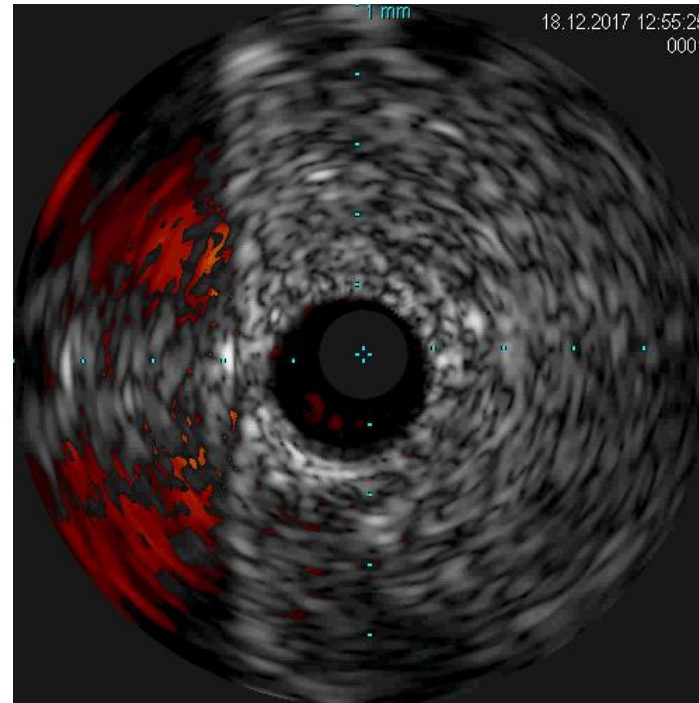
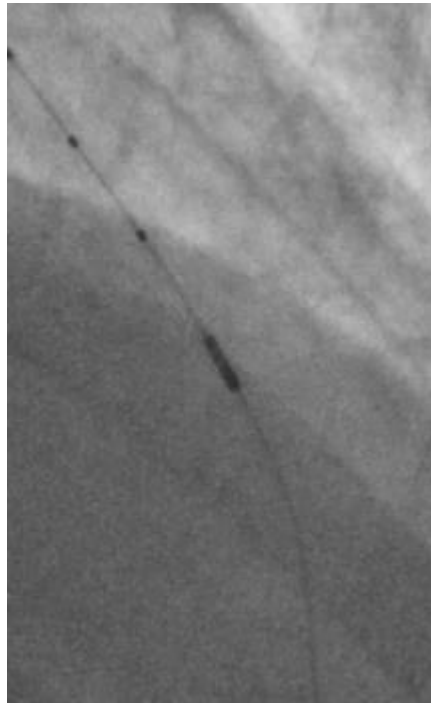
Systole après nitré

Trajet coronaire intramyocardique ?

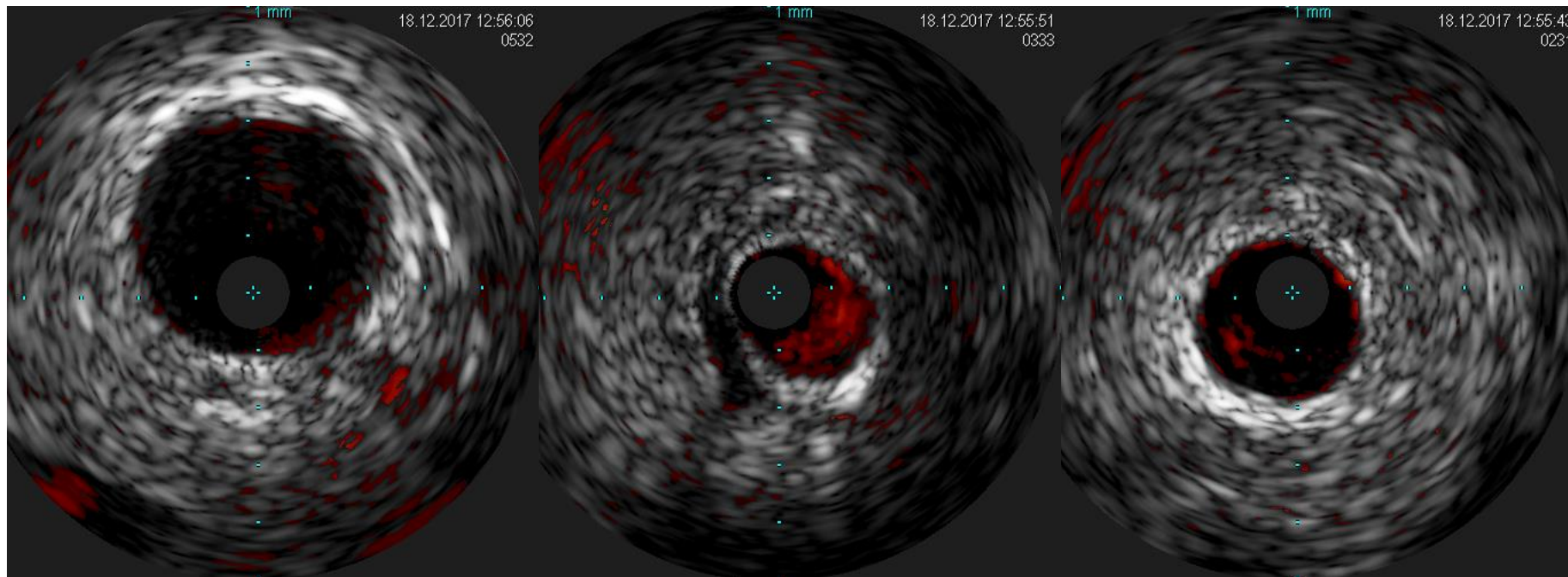


Trajet coronaire intramyocardique ?

Imagerie endocoronaire



Trajet coronaire intramyocardique



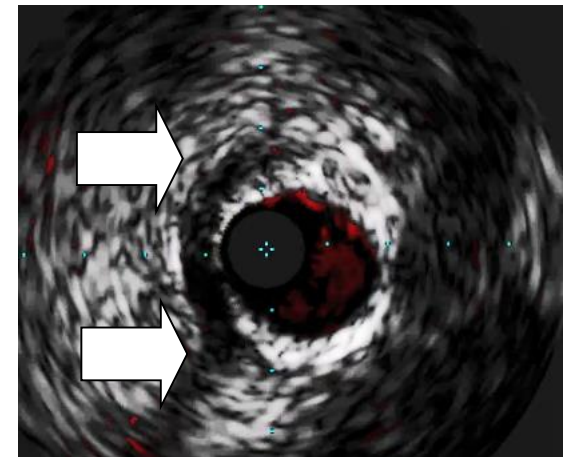
IVA I

IVA II (pont musculaire)

IVA III

Atheroma free

Half-moon sign



Trajet coronaire intramyocardique

situation non rare

douleur thoracique suspecte
(événement cardiaque fréquent)
+
trajet coronaire intramyocardique
(particularité anatomique non rare)

lien de causalité ?

trajet intramyocardique incident

trajet intramyocardique pathologique

Trajets coronaires intramyocardiques

JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY

VOL. 78, NO. 22, 2021

© 2021 BY THE AMERICAN COLLEGE OF CARDIOLOGY FOUNDATION

PUBLISHED BY ELSEVIER

THE PRESENT AND FUTURE

JACC STATE-OF-THE-ART REVIEW

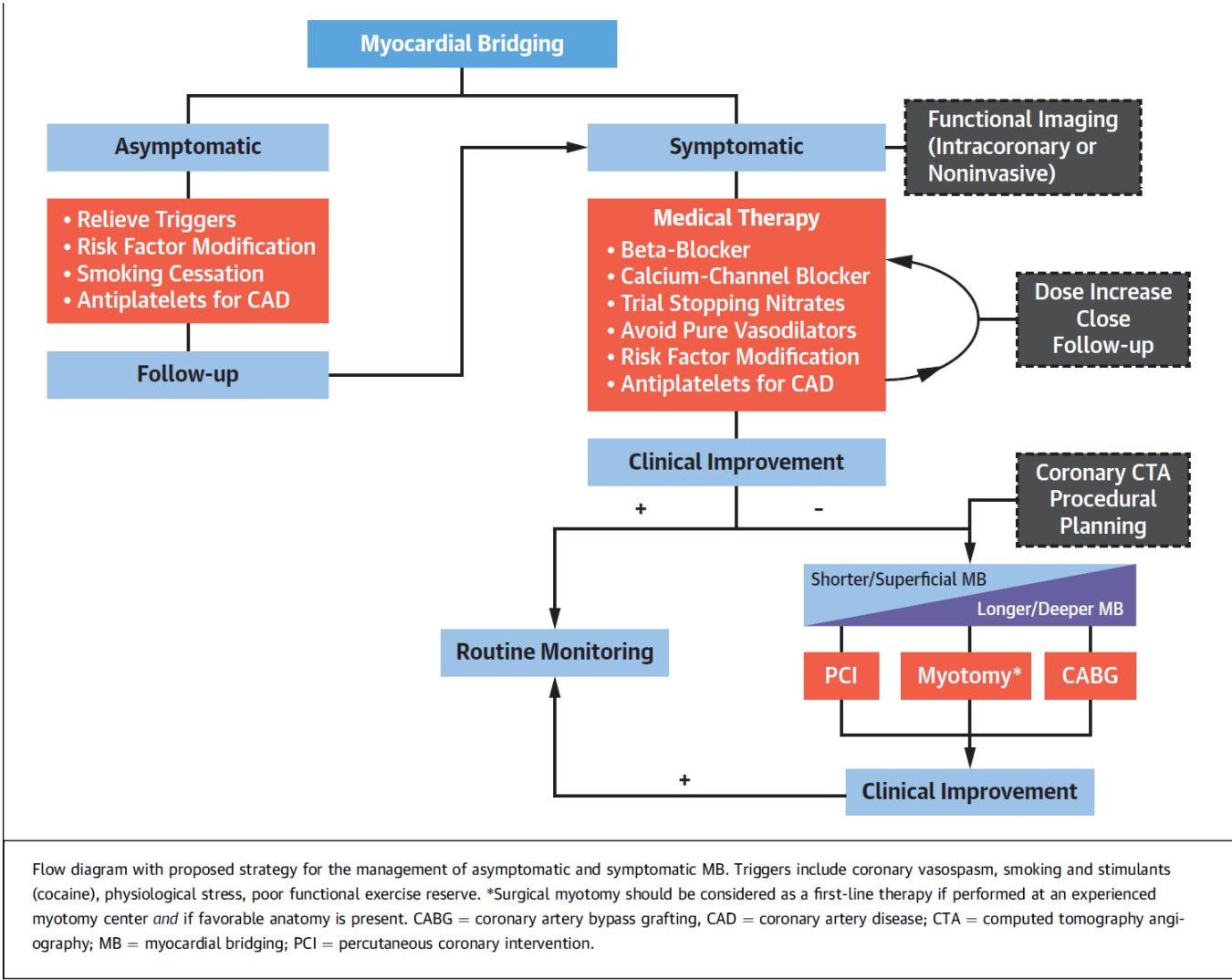
Myocardial Bridging: Diagnosis, Functional Assessment, and Management

JACC State-of-the-Art Review

David Sternheim, MD,^{a,*} David A. Power, MD,^{a,*} Rajeev Samtani, MD,^a Anapoorna Kini, MD,^a
Valentin Fuster, MD, PhD,^{a,b} Samin Sharma, MD^a



Trajet coronaire intramyocardique



Adenosine testing
Microvascular dysfunction



Acetylcholine testing
Coronary spasm



Dobutamine testing
Hemodynamically significant MB

Diagnostic d'élimination

Trajet coronaire intramyocardique

Surgical Unroofing of Myocardial Bridges

Perry Choi,* Hanjay Wang,* Jennifer Tremmel,[†] Ingela Schnittger,[†] Kan Saito,* Michael Ma,* Teimour Nasirov,* and Jack Boyd*



Myocardial bridges (MB) are a congenital variant in which an epicardial coronary artery—most commonly the left anterior descending (LAD)—is contained within an intramyocardial segment. The clinical significance of this lesion varies from no symptoms to debilitating angina, ventricular arrhythmia, and even sudden cardiac arrest. Traditionally difficult to diagnose, symptomatic myocardial bridges remain an elusive entity with a lack of clarity regarding medical treatment and surgical indications. Importantly, studies have shown that with appropriate patient selection, MB unroofing is an effective treatment for symptomatic lesions, in both the adult and pediatric populations. This article describes the pre-operative evaluation and the surgical approach for myocardial bridges.

Operative Techniques in Thoracic and Cardiovascular Surgery 28:110–126 © 2022 Elsevier Inc. All rights reserved.

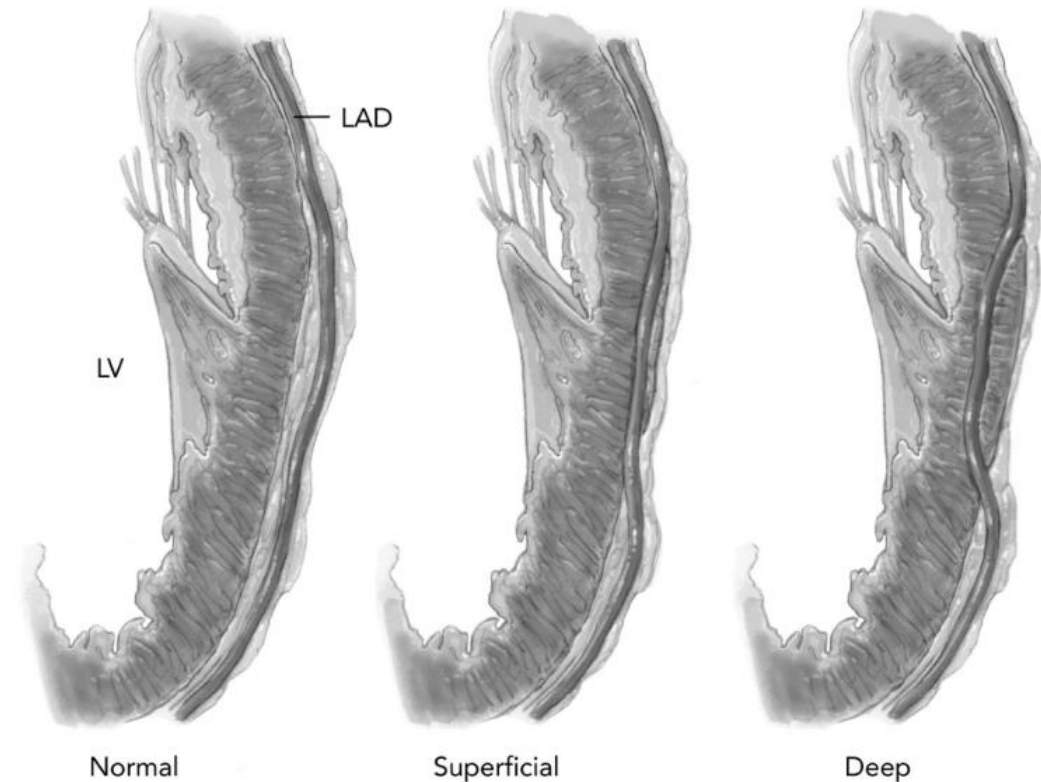
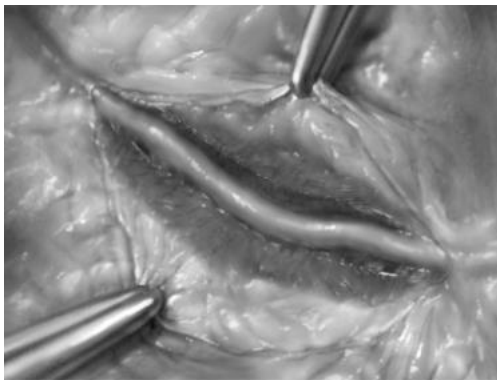


Figure 1 Illustration of myocardial bridge in cross-section. These illustrated cross-sections depict how a myocardial bridge occurs when a coronary artery, usually the left anterior descending, contains an intramyocardial segment. LAD, left anterior descending coronary artery; LV, left ventricle.

Trajets coronaires intramyocardiques

Description dans un compte-rendu

- trajet intramyocardique : certain/possible
- compression systolique : oui (degré) / non

- Anomalies sur le trajet
- **Anomalies de terminaison**
- Anomalies de connexion

Anomalies de terminaison ou fistules coronaires

Prévalence angiographique $\approx 0.1\%$

Classification

- | | |
|--|----------------------------------|
| ① Vaisseau donneur | ④ Nombre |
| ② Segment de connexion (vaisseau donneur)
Proximal/Moyen/Distal | ⑤ Taille
Large/Moyenne/Petite |
| ③ Site de drainage | ⑥ Retentissement |

Fistules coronaires – Sites de drainage

ANOMALIES DE
TERMINAISON

=

FISTULES
CORONAIRES

CORONARO -
CAMÉRALES

DRAINAGE : OD VD OG VG
CONGÉNITALES +++

CORONARO -
VEINEUSES

DRAINAGE : VCS VCI SC
CONGÉNITALES +++

CORONARO -
PULMONAIRES

DRAINAGE : TRONC PULMONAIRE
CONGÉNITALES SOUVENT

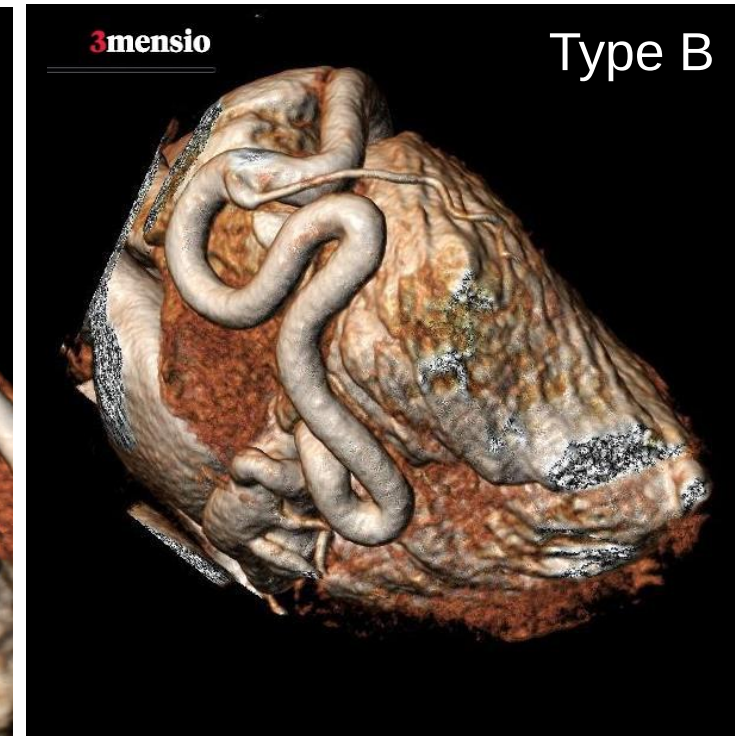
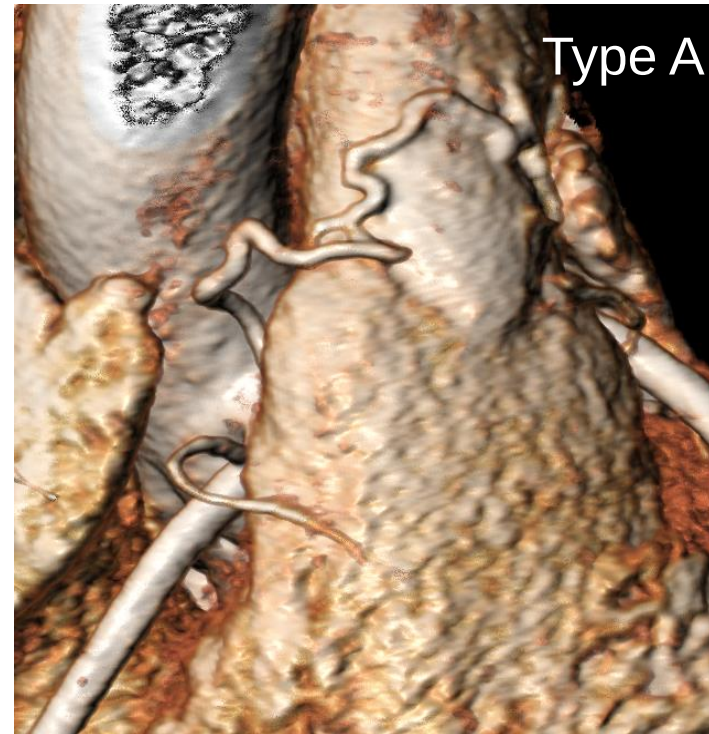
CORONARO -
BRONCHIQUES

ANASTOMOSES AVEC
RESEAU ARTERIEL BRONCHIQUE
ACQUISES SOUVENT

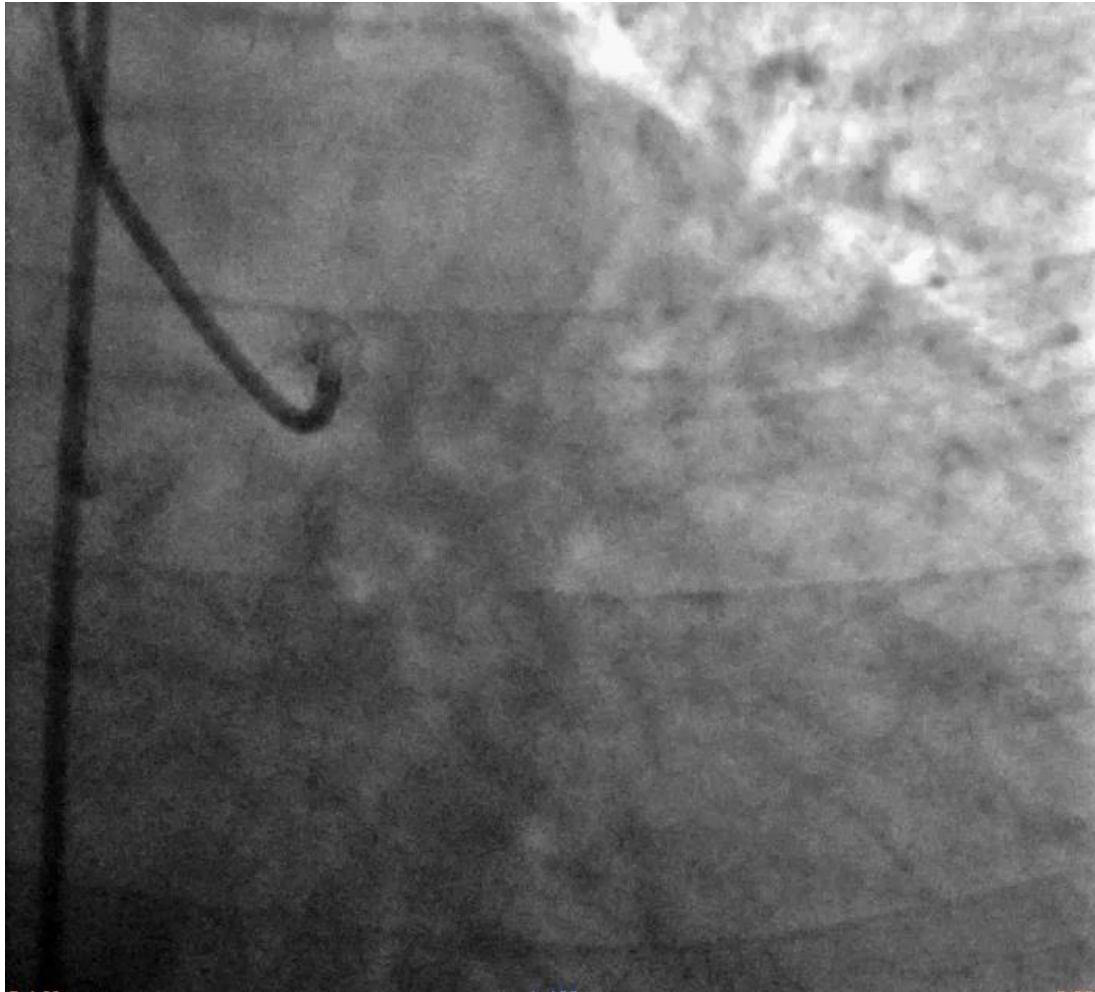
Fistules coronaires

Classification

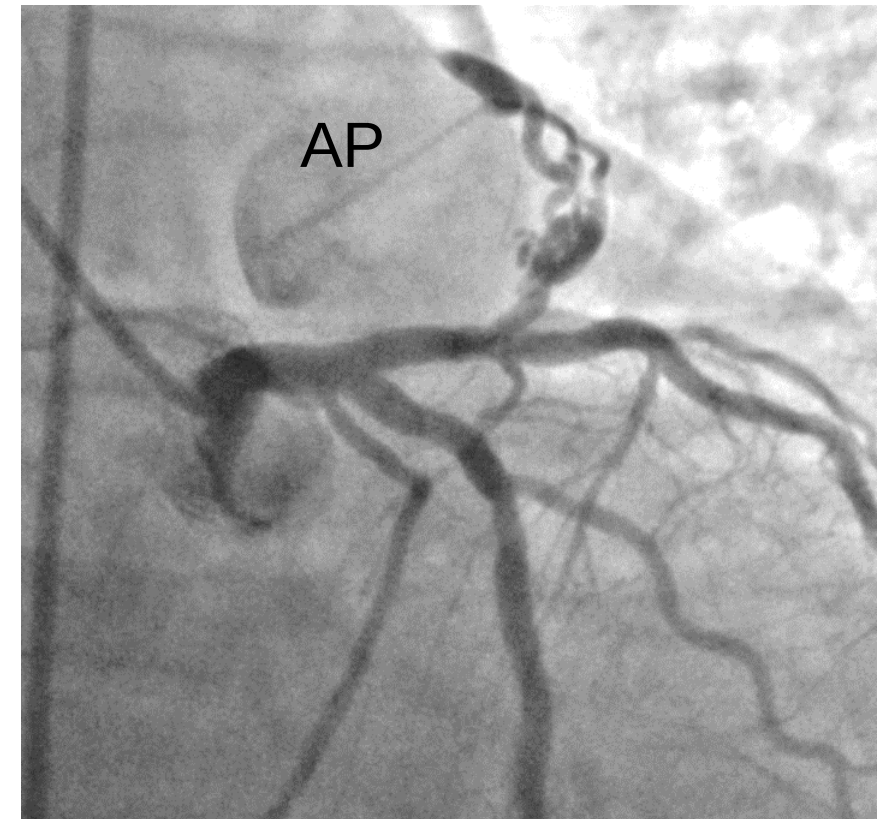
- Vaisseau donneur
- Segment de connexion :
type A : tiers proximal
type B : tiers moyen ou distal



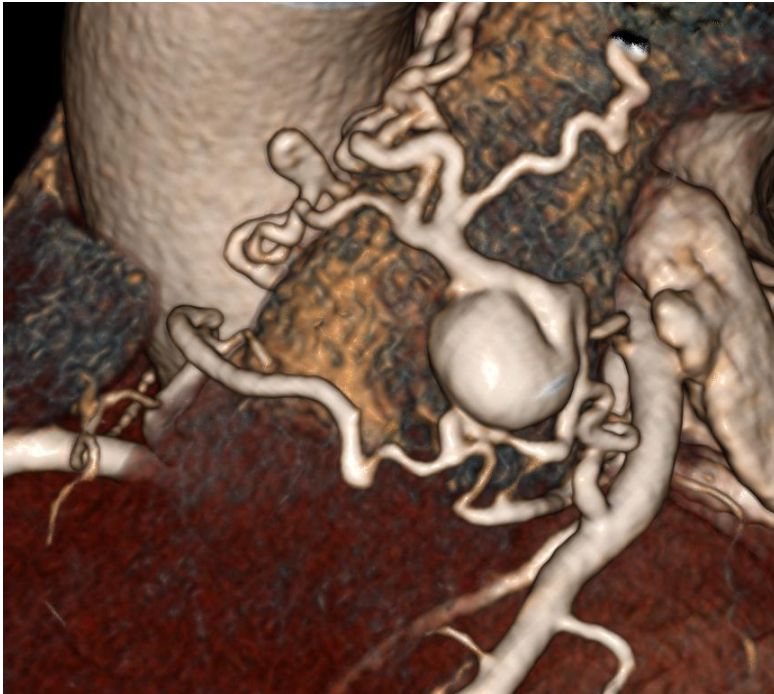
Fistule droite proximale-AP



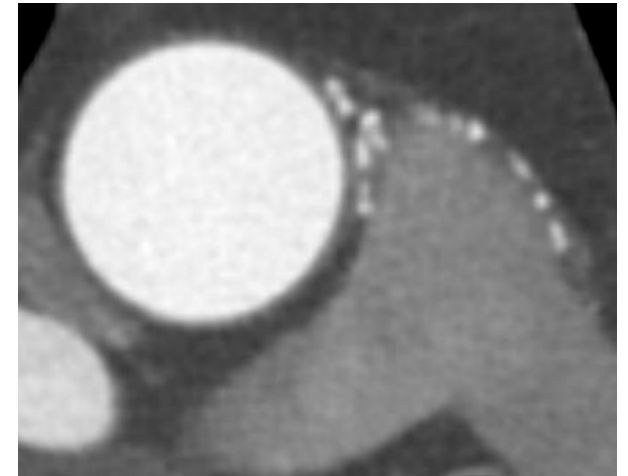
Fistule IVA-AP type A



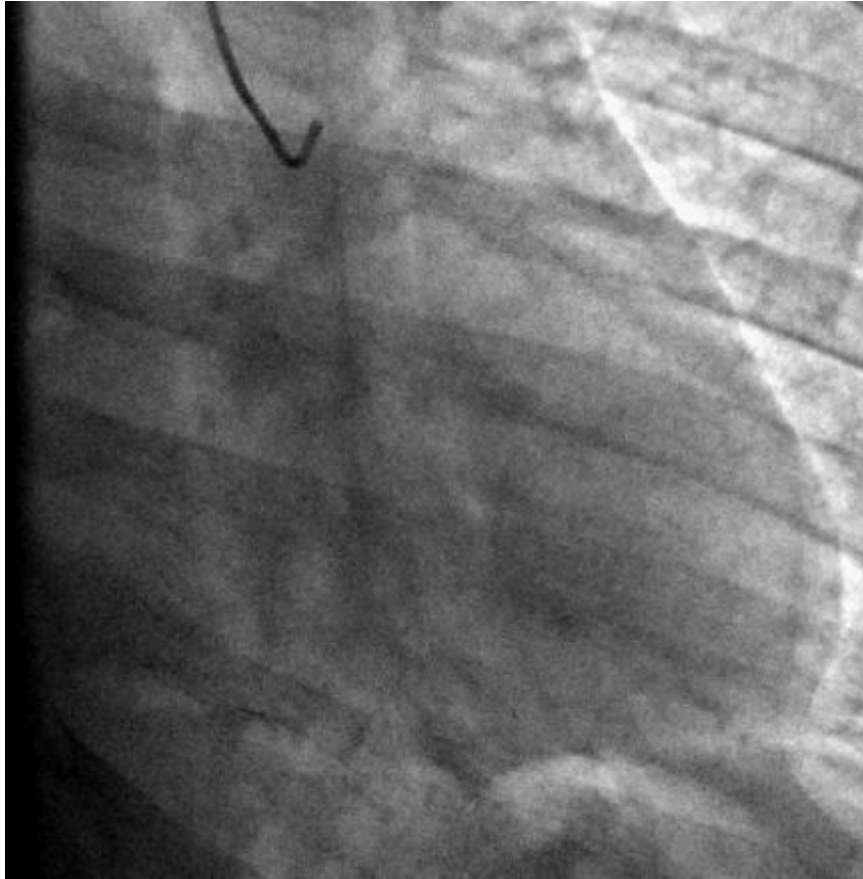
Fistules coronaro-pulmonaires



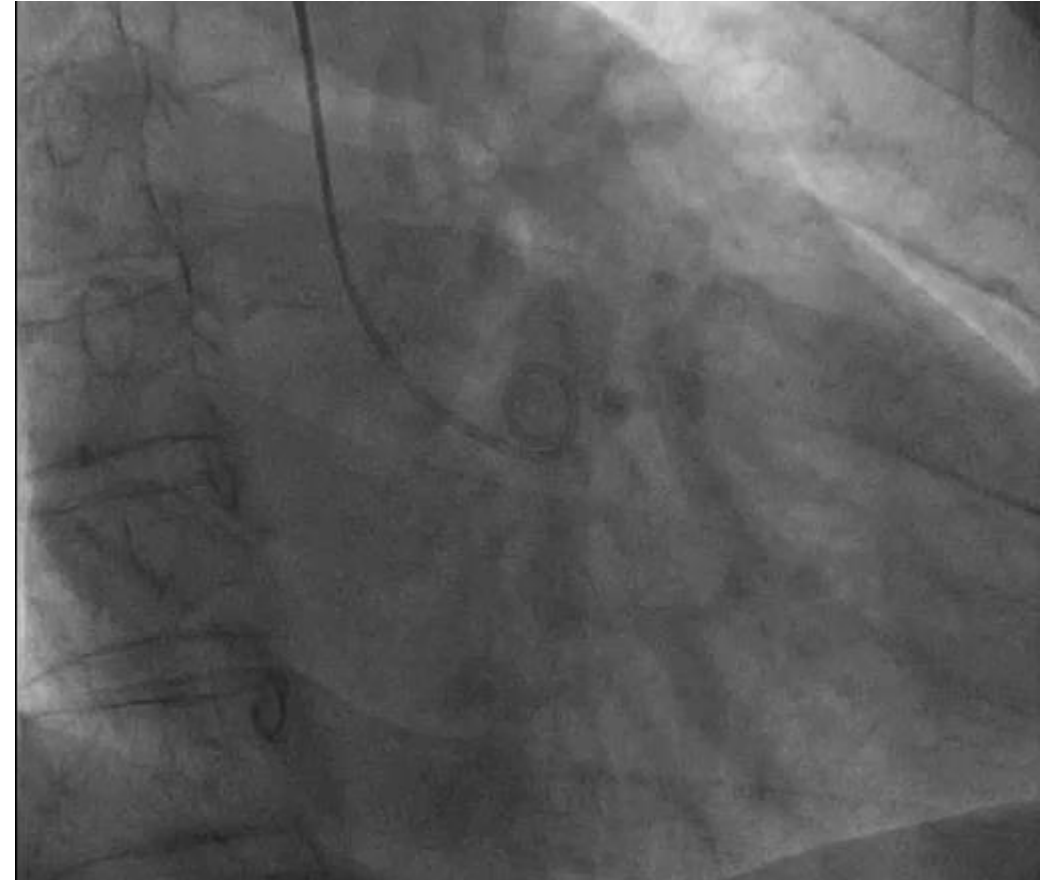
Trajets tortueux
Multiples
Collecteur distal
Petite taille



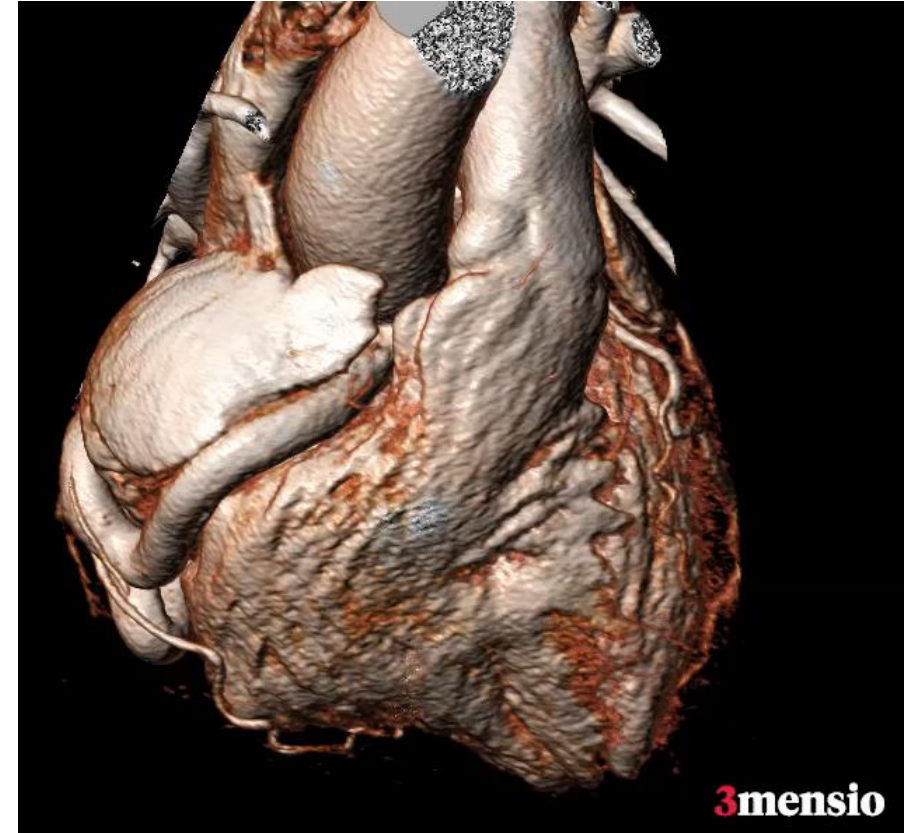
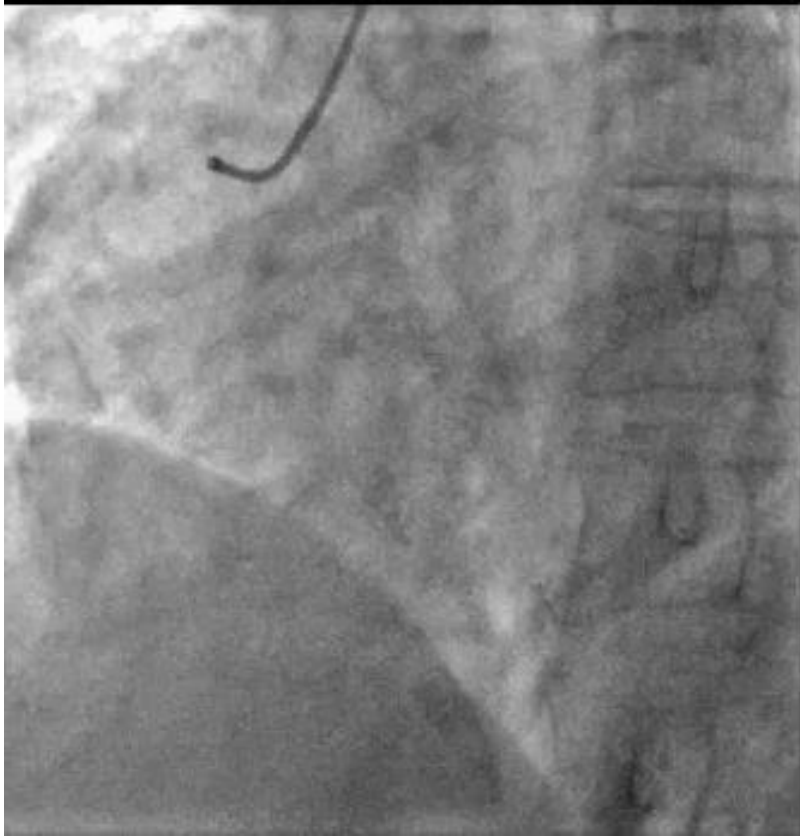
Fistules multiples IVA-AP



Fistule CX-sinus coronaire (type B)



Fistule CX-sinus coronaire (type B)



Fistule droite-sinus coronaire (type B)

Fistules coronaires

JACC: CARDIOVASCULAR INTERVENTIONS
© 2021 BY THE AMERICAN COLLEGE OF CARDIOLOGY FOUNDATION
PUBLISHED BY ELSEVIER

VOL. 14, NO. 13, 2021

STATE-OF-THE-ART REVIEW

CORONARY

Coronary Artery Fistulas

Indications, Techniques, Outcomes, and Complications of Transcatheter Fistula Closure



Mohammed Al-Hijji, MD,^{a,b} Abdallah El Sabbagh, MD,^c Stephanie El Hajj, MD,^a Mohamad AlKhouli, MD,^a
Bassim El Sabawi, MD,^a Allison Cabalka, MD,^a William R. Miranda, MD,^a David R. Holmes, MD,^a
Charanjit S. Rihal, MD^a

Classification de la taille

■ **Fistule de type A**

- fistule large :

Φ fistule > 2 fois Φ vaisseau donneur en aval connexion

- fistule moyenne :

Φ taille fistule 1-2 fois Φ vaisseau donneur en aval connexion

- fistule petite :

Φ fistule < 1 fois Φ vaisseau donneur en aval connexion

Reddy G et al. Circ Cardiovasc Int. 2015.

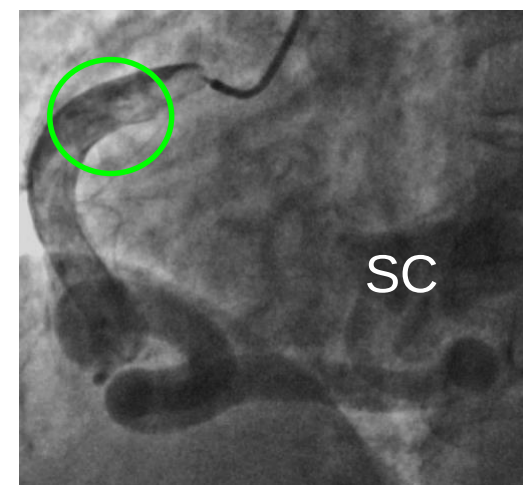
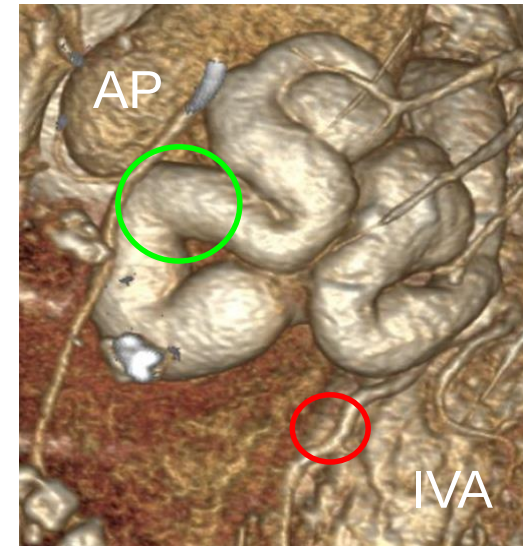
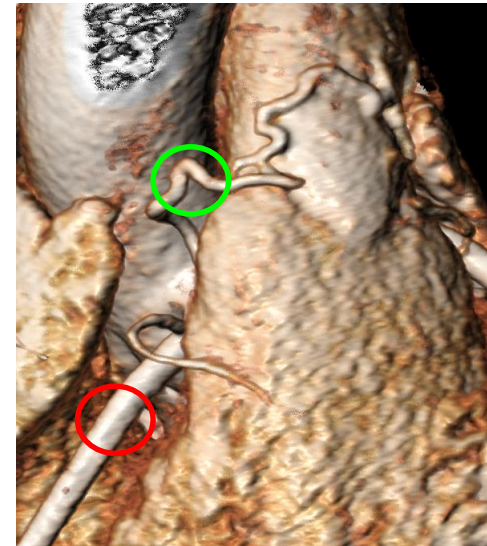
■ **Fistule de type B**

- comparaison à artère controlatérale ou homolatérale

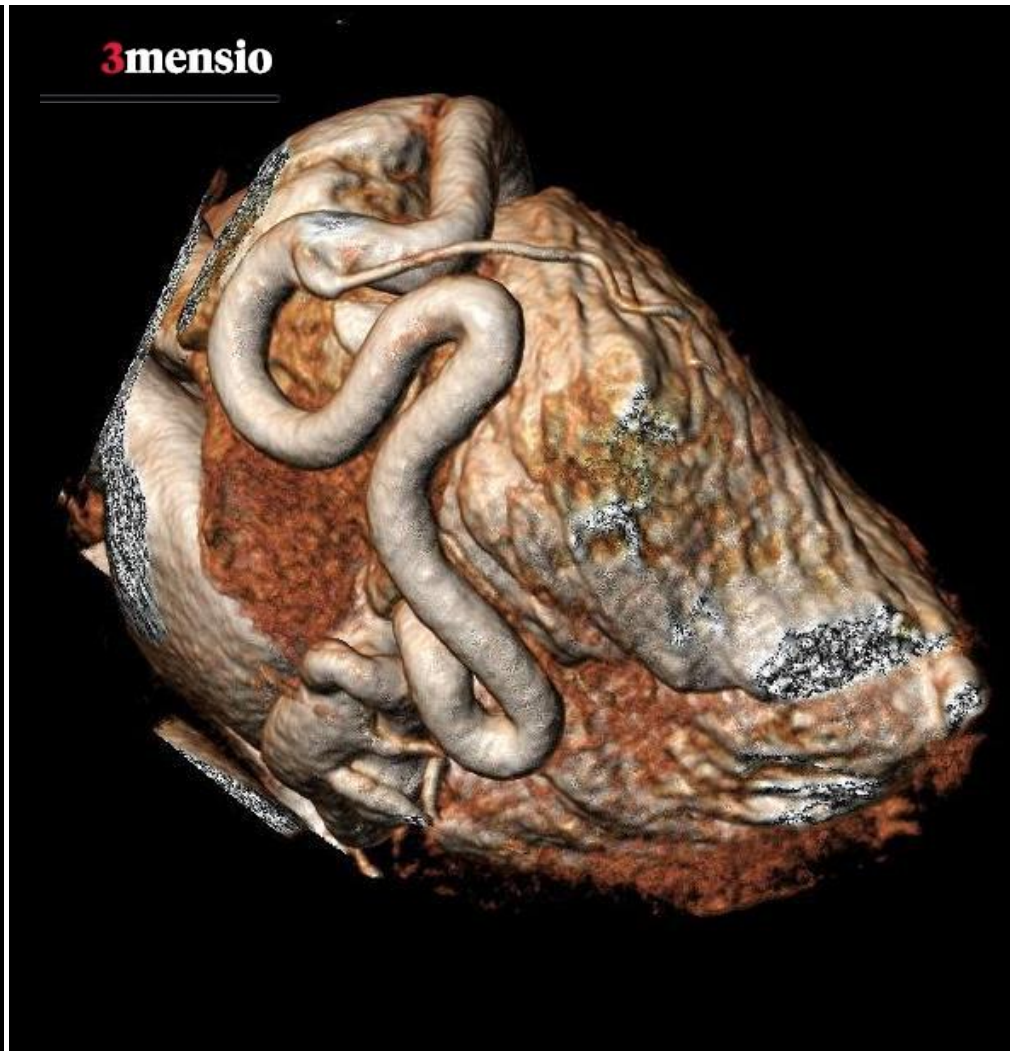
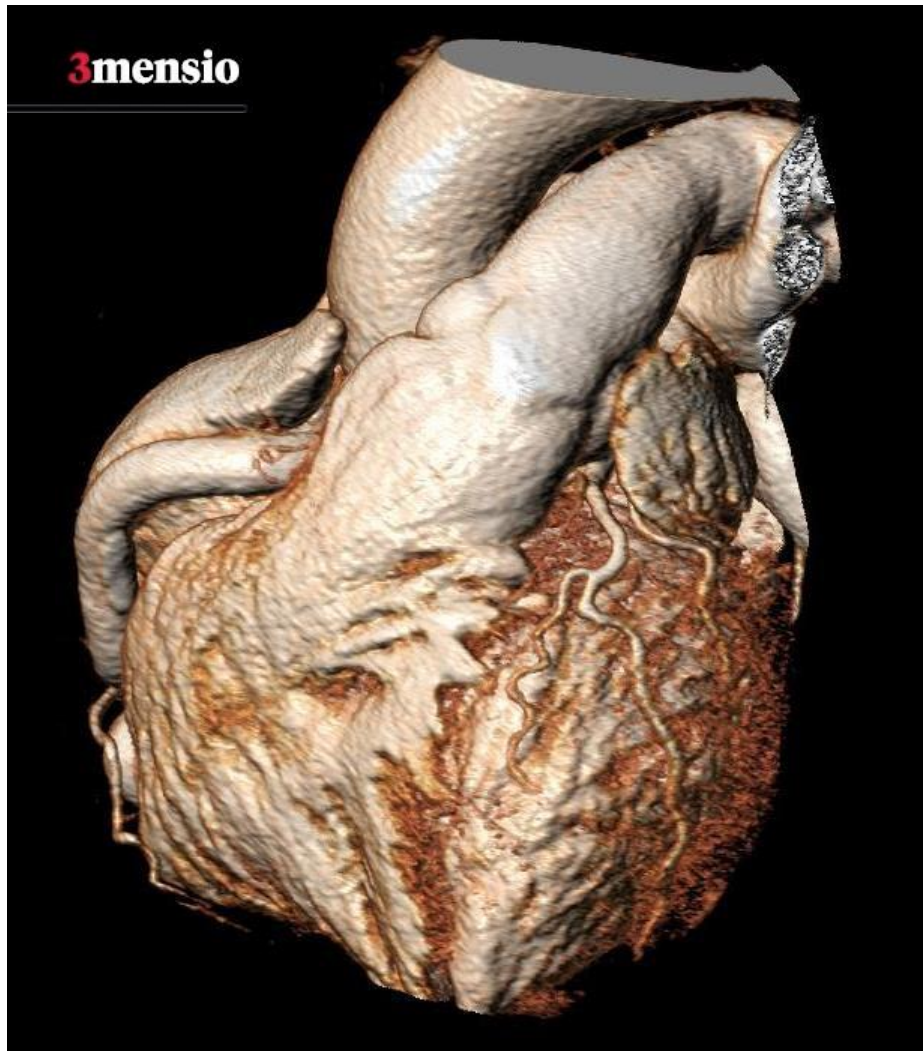
- Φ vaisseau donneur / Φ artère controlatérale ou homolatérale

- mêmes critères que précédemment

Al-Hijji M et al. JACC cv int. 2021.

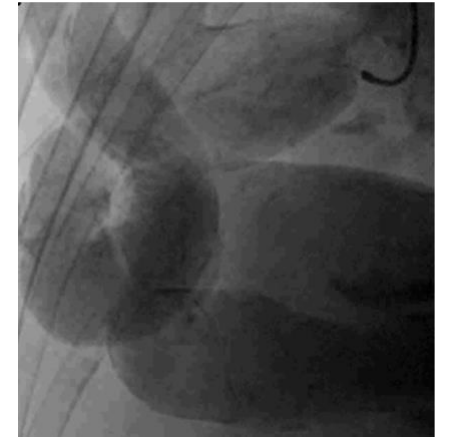


Fistule droite - sinus coronaire (type B)



Fistules coronaires

- Retentissement physiologique : pas toujours présent
 - shunt gauche-droit significatif →
 - shunt gauche-gauche significatif →
 - vol coronaire significatif →
- insuffisance cardiaque droite
 - dilatation VG
 - angor/ischémie myocardique
-
- Retentissement anatomique : fréquent avec le temps
 - déformation anévrysmale
 - allongement vasculaire avec tortuosités
 - calcifications
 - thrombus



4.17 Coronary anomalies

2020 ESC Guidelines for the management of adult congenital heart disease

4.17.1.3 Coronary artery fistulae

A coronary artery fistula, whether congenital or acquired, is an abnormal connection between a coronary artery and cardiac chamber or vessel. Small fistulae have a good prognosis without treatment. Medium or large fistulae are associated with long-term complications (angina, myocardial infarction, arrhythmias, heart failure, and endocarditis). The presence of symptoms, complications, and a significant shunt are the main indications for percutaneous or surgical closure.

Fistules coronaires

JACC: CARDIOVASCULAR INTERVENTIONS

© 2021 BY THE AMERICAN COLLEGE OF CARDIOLOGY FOUNDATION

PUBLISHED BY ELSEVIER

VOL. 14, NO. 13, 2021

STATE-OF-THE-ART REVIEW

CORONARY

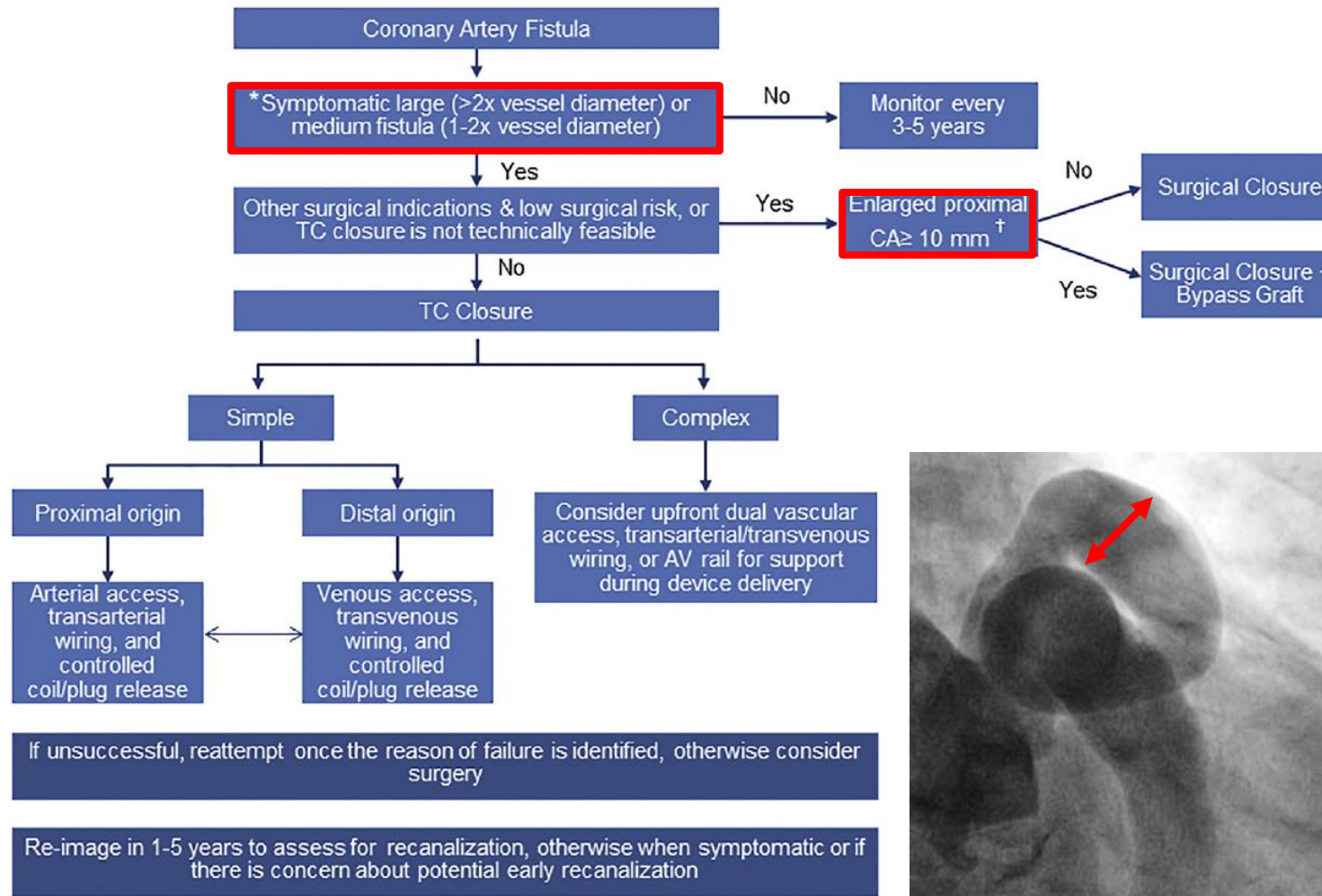
Coronary Artery Fistulas

Indications, Techniques, Outcomes, and Complications of Transcatheter Fistula Closure



Mohammed Al-Hijji, MD,^{a,b} Abdallah El Sabbagh, MD,^c Stephanie El Hajj, MD,^a Mohamad AlKhouli, MD,^a
 Bassim El Sabawi, MD,^a Allison Cabalka, MD,^a William R. Miranda, MD,^a David R. Holmes, MD,^a
 Charanjit S. Rihal, MD^a

FIGURE 1 Algorithm of Coronary Artery Fistula Evaluation and Management



*Symptomatic fistulas are coronary artery (CA) fistulas that potentially lead to myocardial ischemia, vessel aneurysm and rupture, endocarditis, unexplained cardiac chamber enlargement/dysfunction, or arrhythmia. †An enlarged proximal CA with diameter ≥ 10 mm has a tendency to thrombose after fistula closure, resulting in myocardial infarction. A simple fistula has a single-vessel origin, simply defined pathways, and a clearly defined termination. A complex fistula is a large fistula with multiple origins and plexiform formation. AV = arteriovenous; TC = transcatheter.

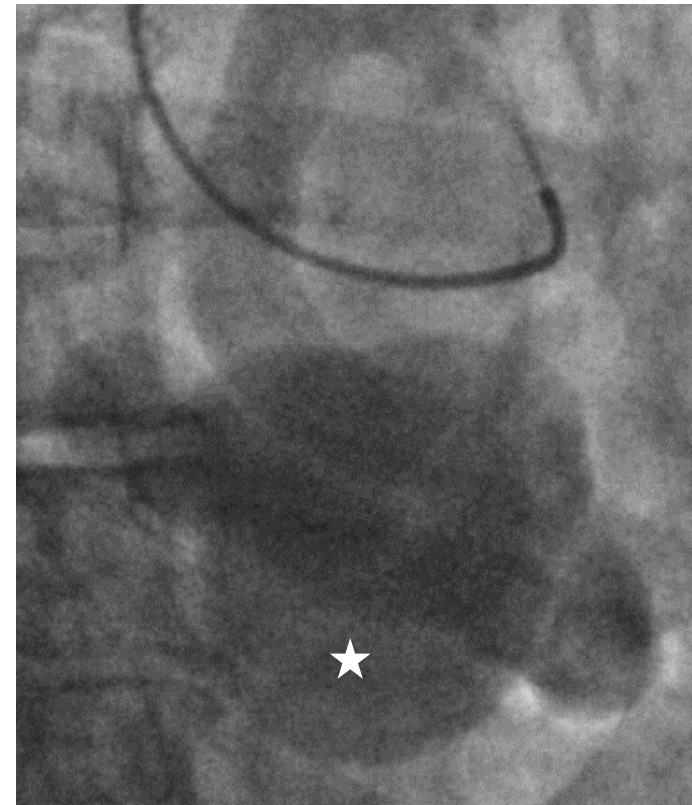
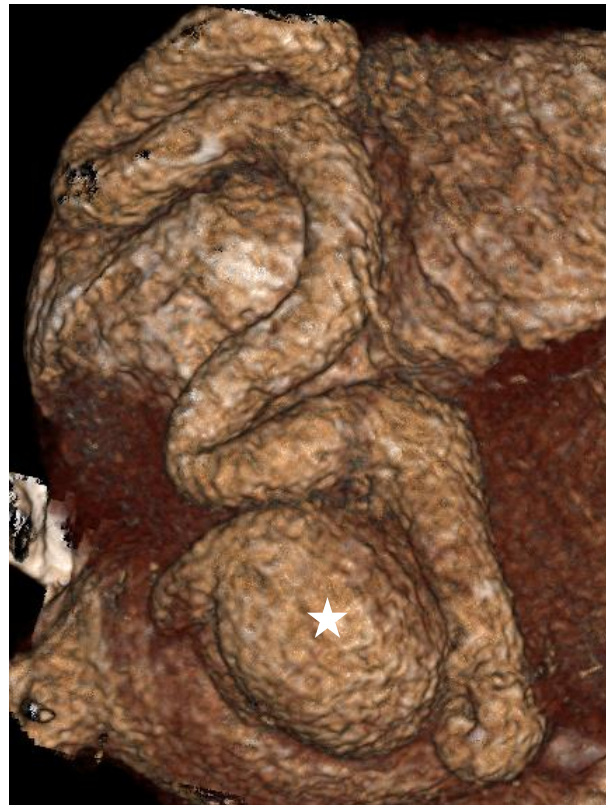


- Procédure complexe type B > type A
- Procédures multiples
- Risque IDM (10%) type B chirurgie/interventionnel



Fistules coronaires

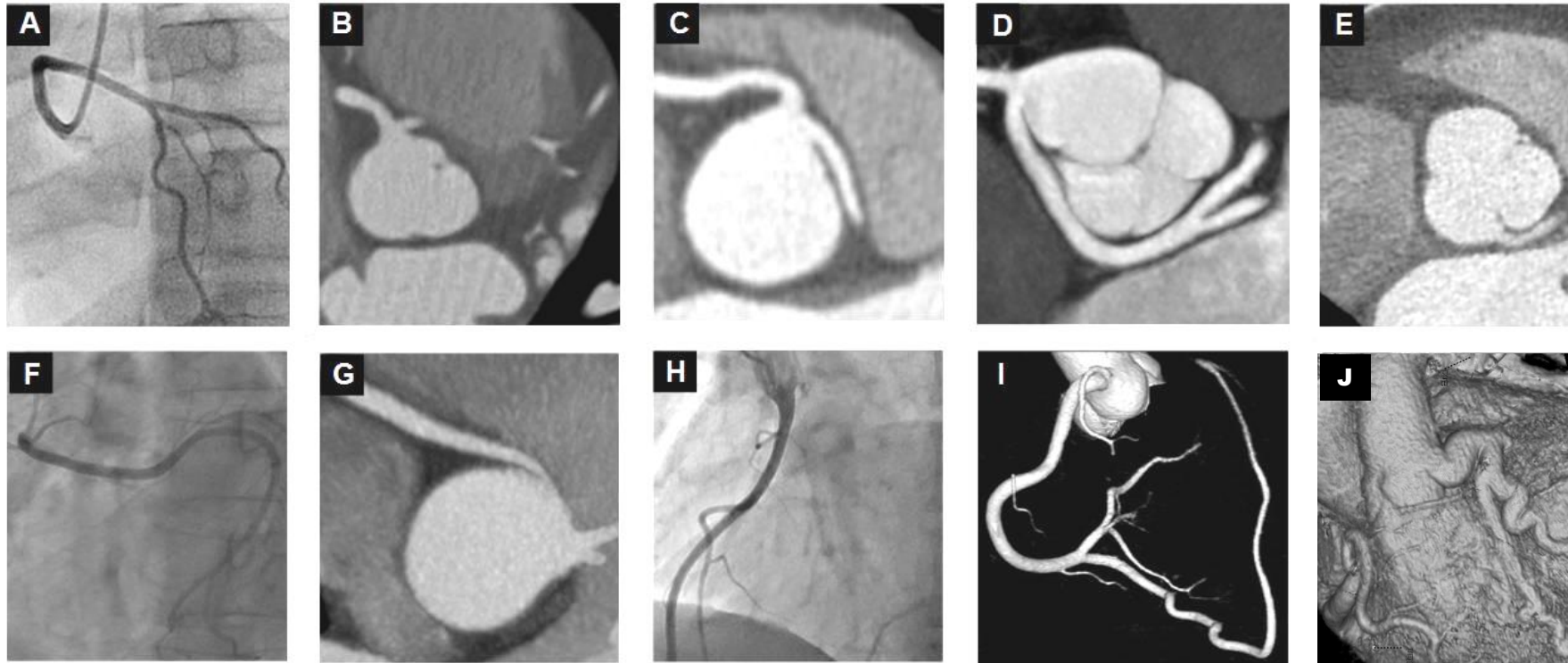
Risque de rupture



Fistule droite-sinus coronaire

- Anomalies sur le trajet
- Anomalies de terminaison
- **Anomalies de connexion**

Nombreuses formes anatomiques



Classification

1 Artère

Tronc
IVA
Circonflexe
Droite
Septale

2 Connexion

Artère controlatérale
Sinus controlatéral
Sinus non coronaire
Sinus approprié
Aorte thoracique
Artère pulmonaire

3 Trajet

Prépulmonaire
Rétropulmonaire
Interartériel
Rétroaortique
Normal

4 Passage

Intramyocardique
Intramural

5 Présentation/Retentissement

ACR
Symptômes ischémiques
Ischémie myocardique
Asymptomatique

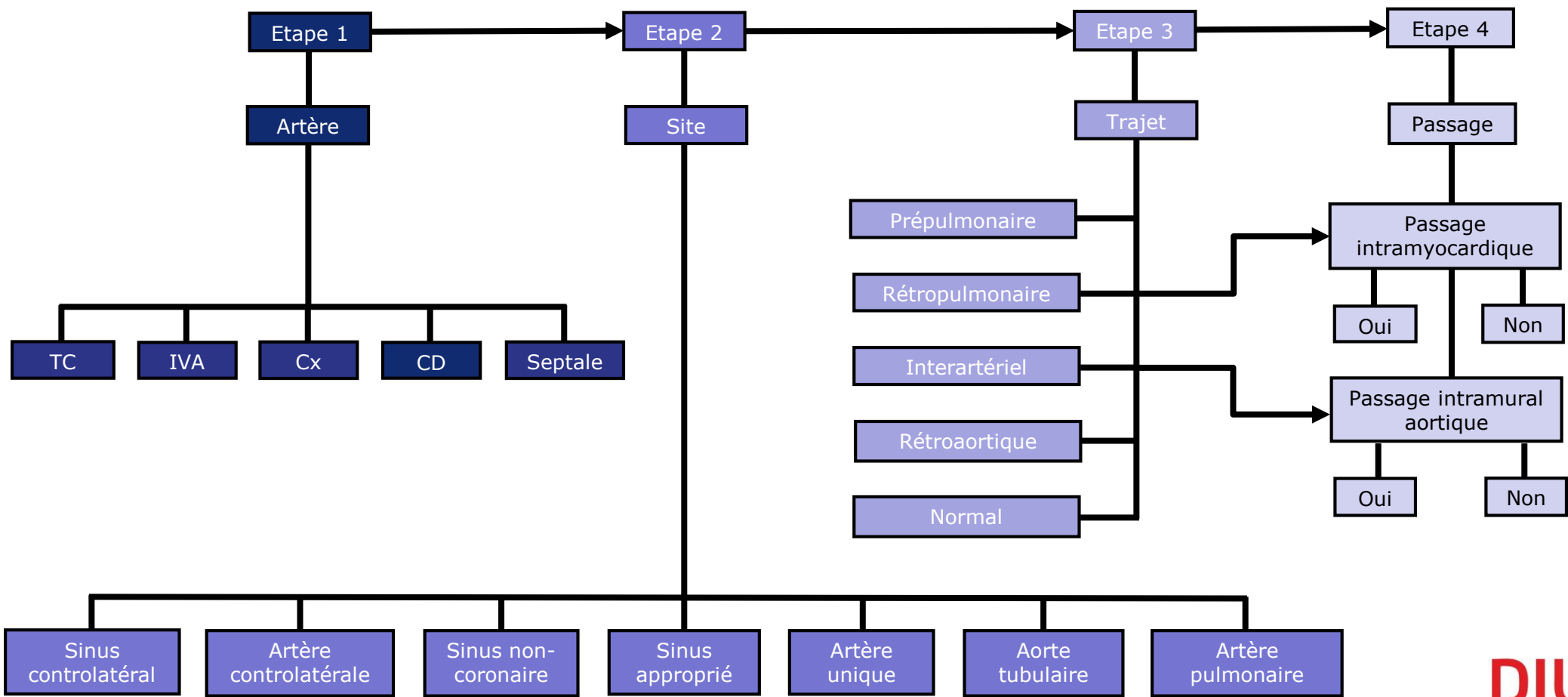
6 Lien de causalité

Présent
Possible/Probable
Absent

7 Risque ACR

Présent
Haut/Bas
Absent
Mal connu

Classification anatomique



- Embryologie et anatomie
- Classification anatomique
- Classification clinique et fonctionnelle
- Classification pronostique

Origine anormale / naissance anormale

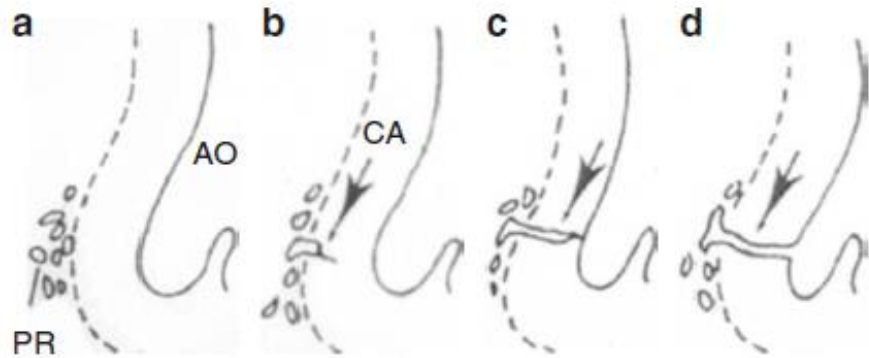
Développement à partir de l'aorte

Connexion anormale

Développement à partir de l'aorte (ébauche des ostia)

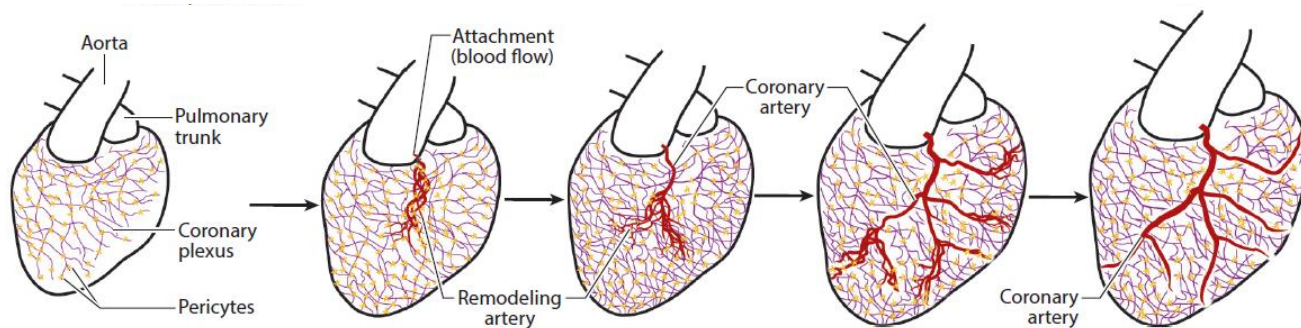
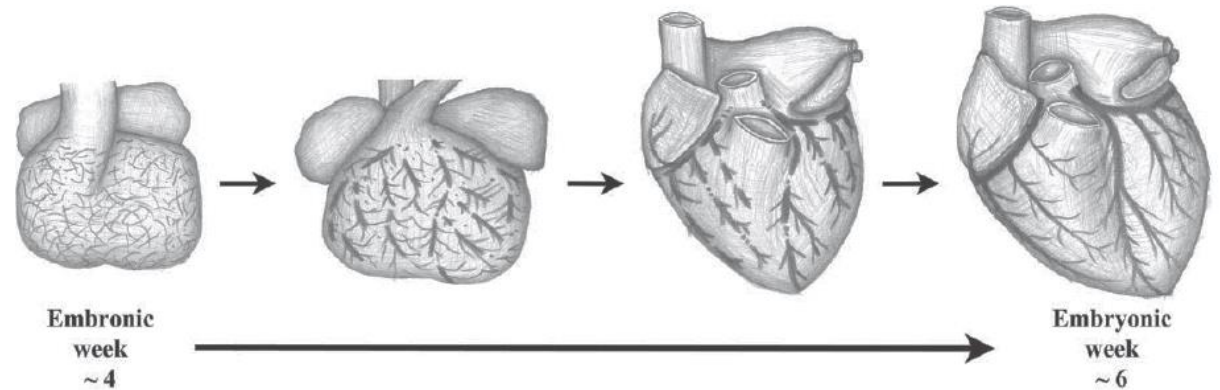
Développement vers l'aorte (réseau coronaire en formation)

Embryologie



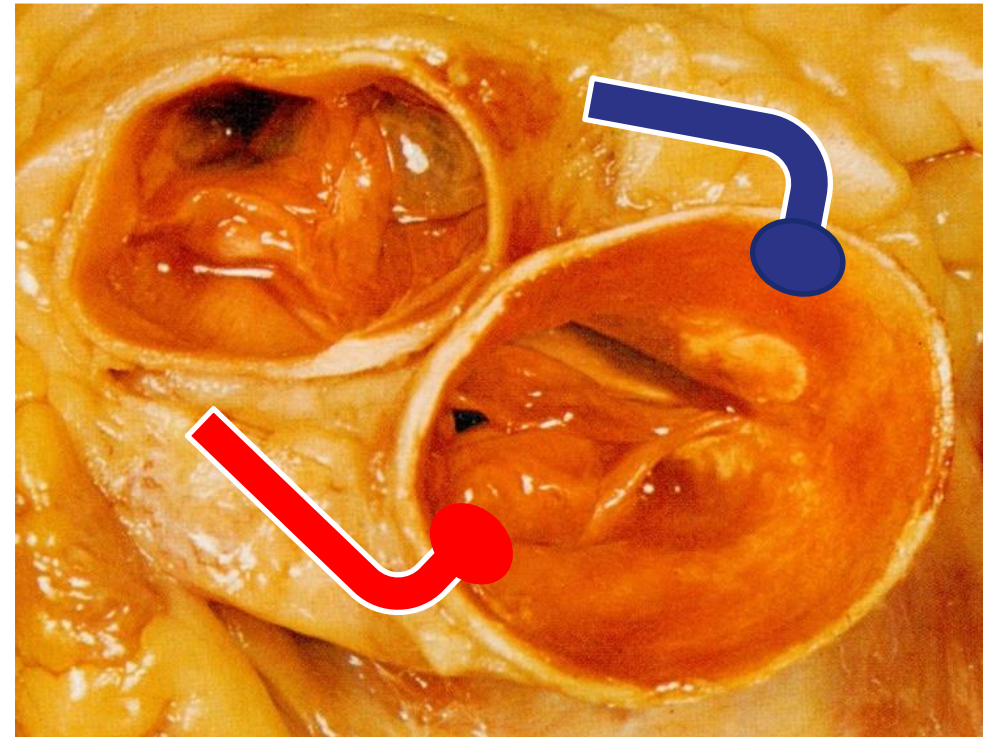
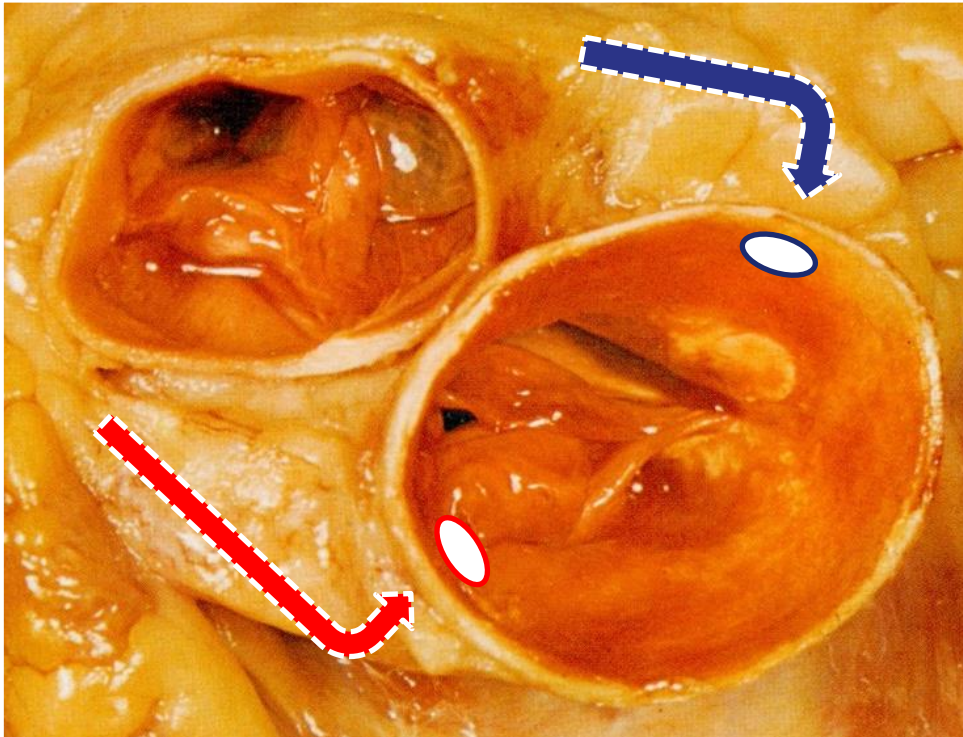
Bogers AJC Anat Embryol 1989

Lluri G. Clin Cardiol 2014

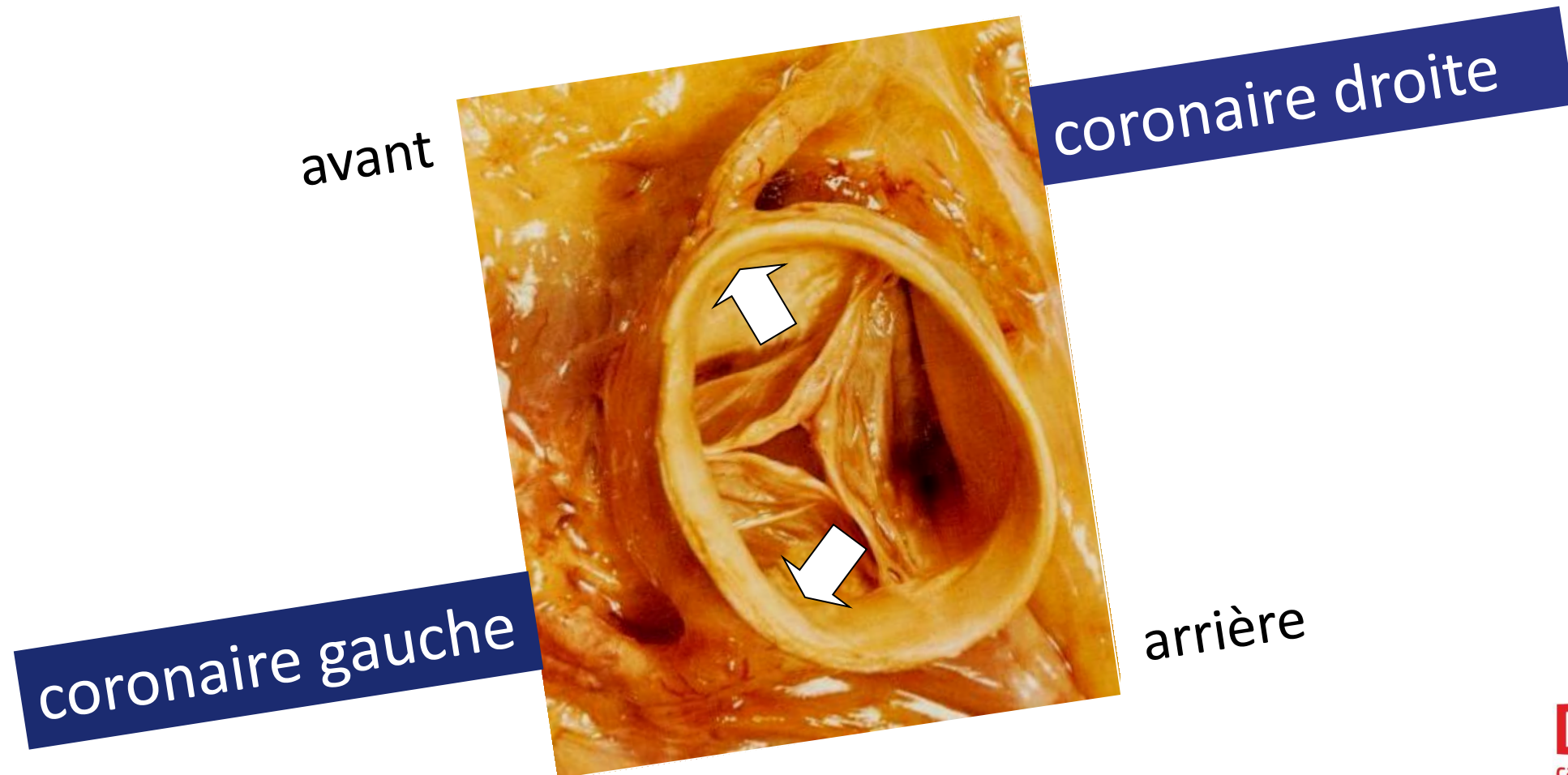


Sharma B Annu Rev Physiol 2017

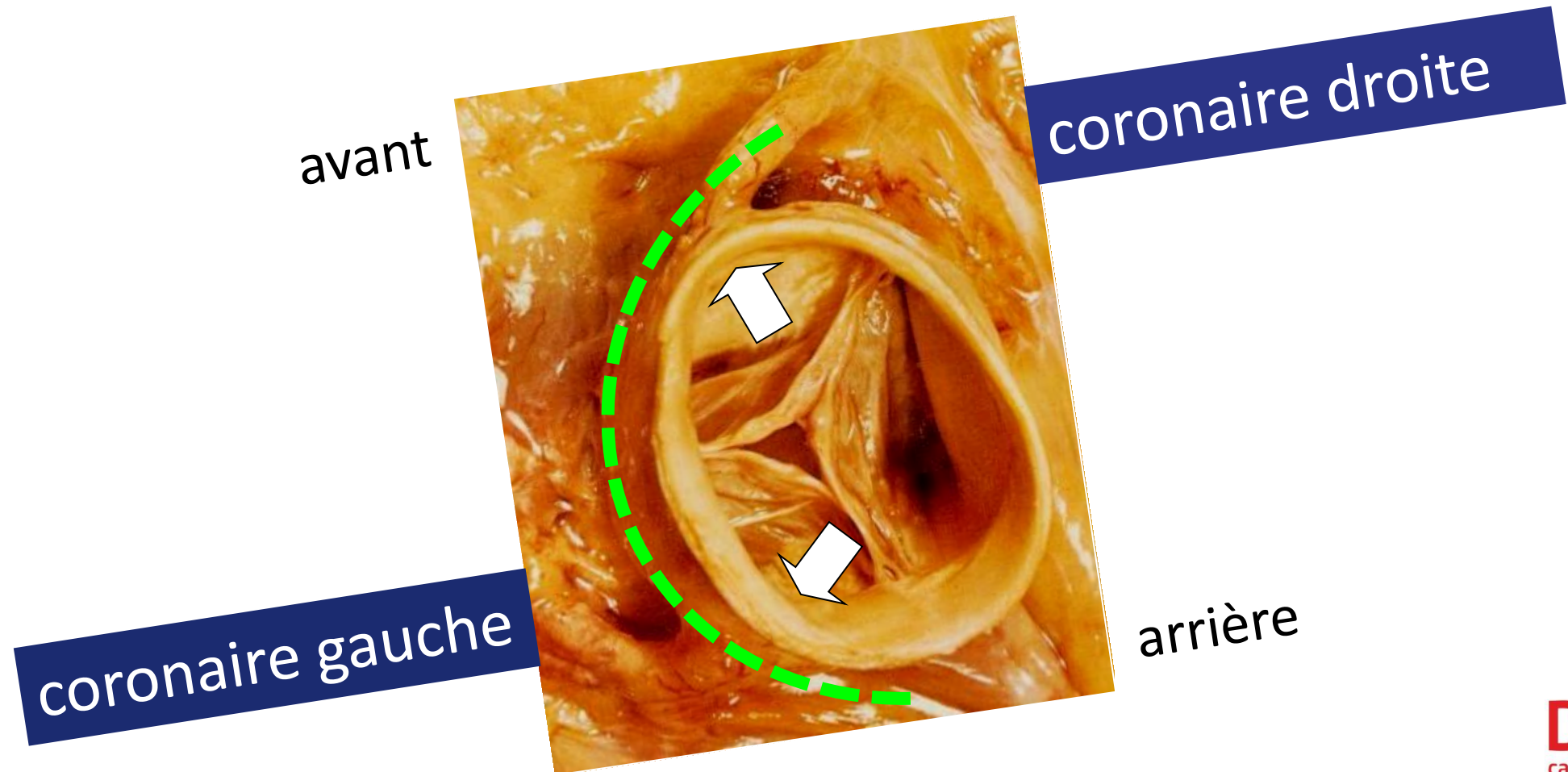
Embryologie et anatomie



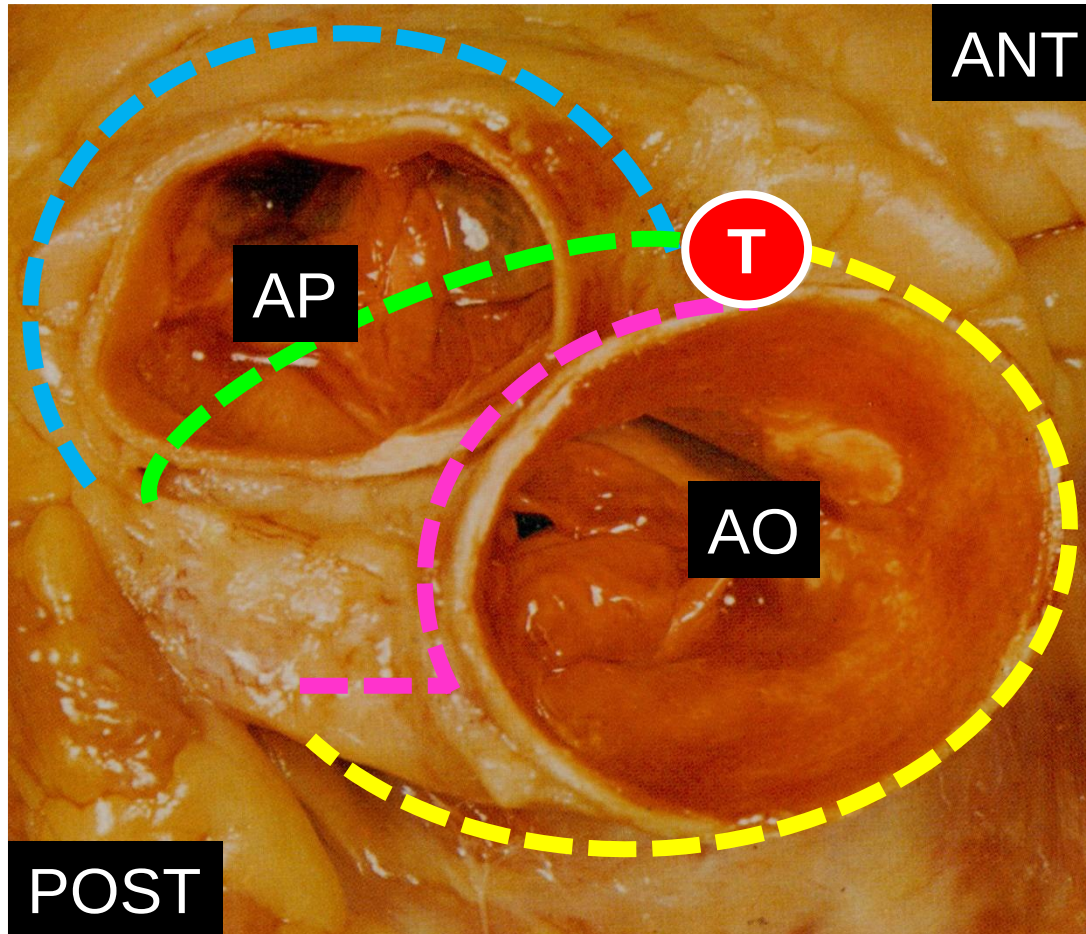
Connexions coronaires normales



Connexions coronaires anormales (---)

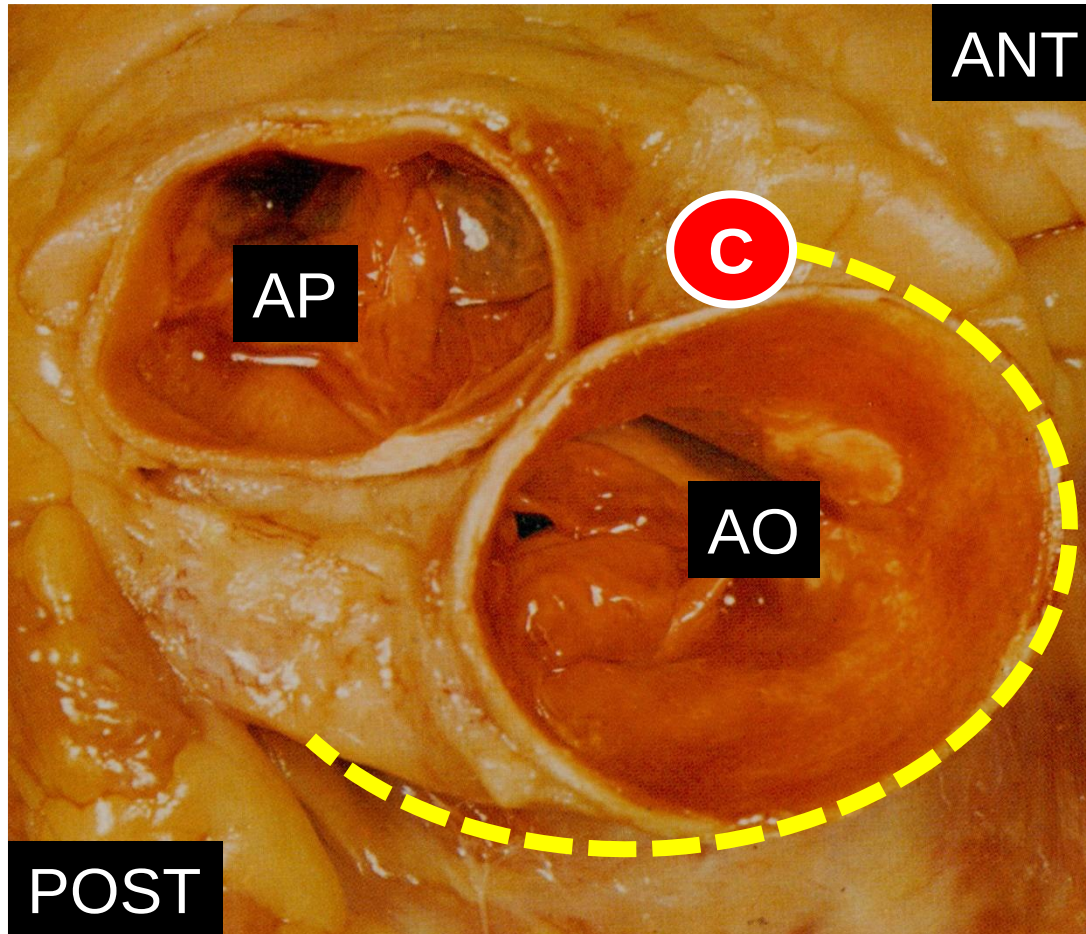


Trajets ectopiques pour tronc/IVA



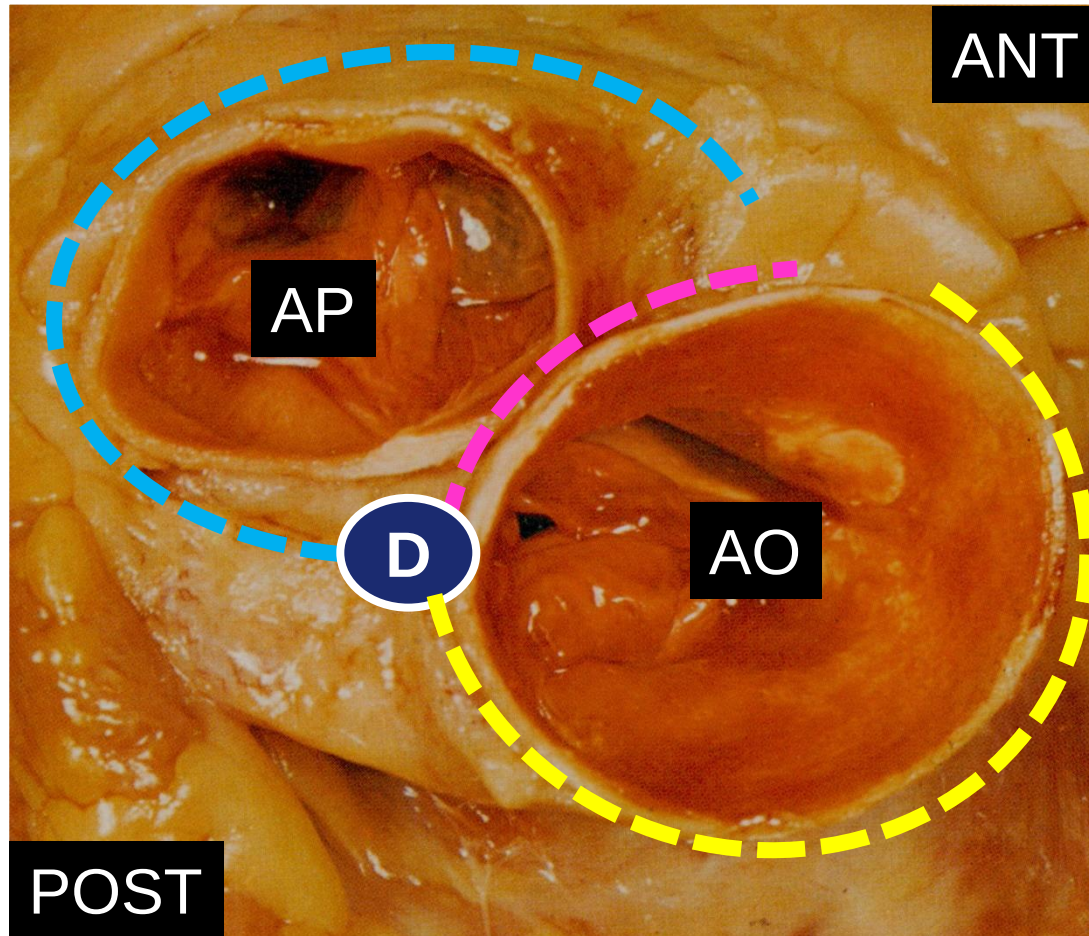
- — — prépulmonaire
- — — rétropulmonaire (intraseptal)
- — — interartériel (préaortique)
- — — rétroaortique

Trajet ectopique pour artère circonflexe



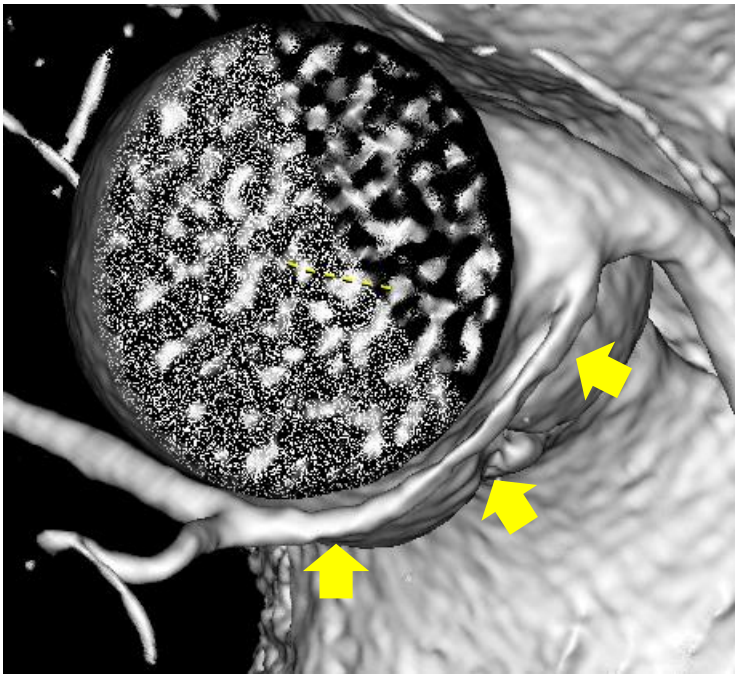
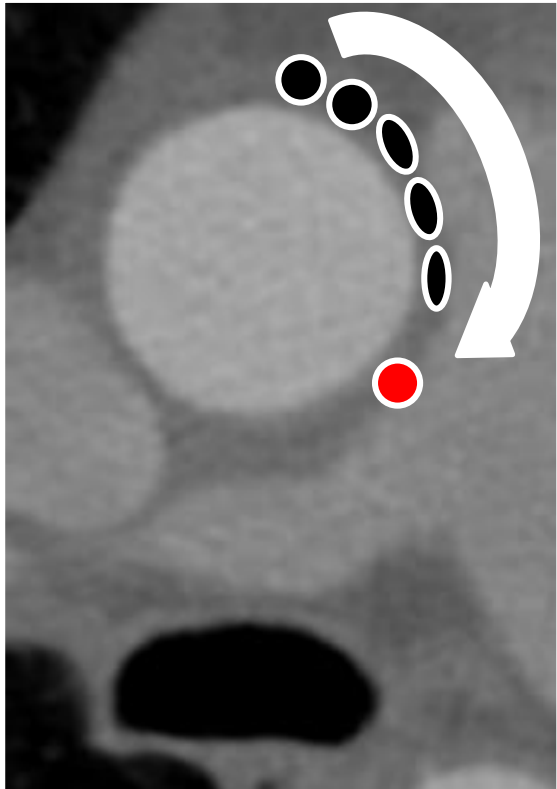
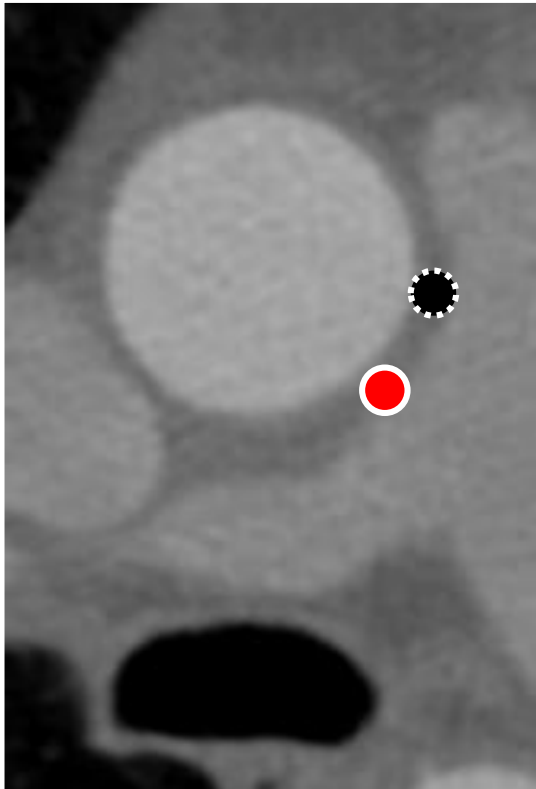
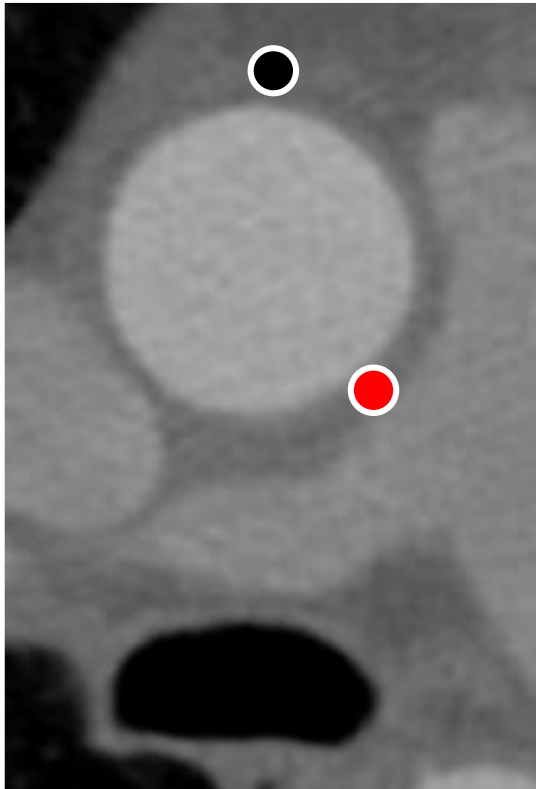
--- rétroaortique

Trajets ectopiques pour coronaire droite

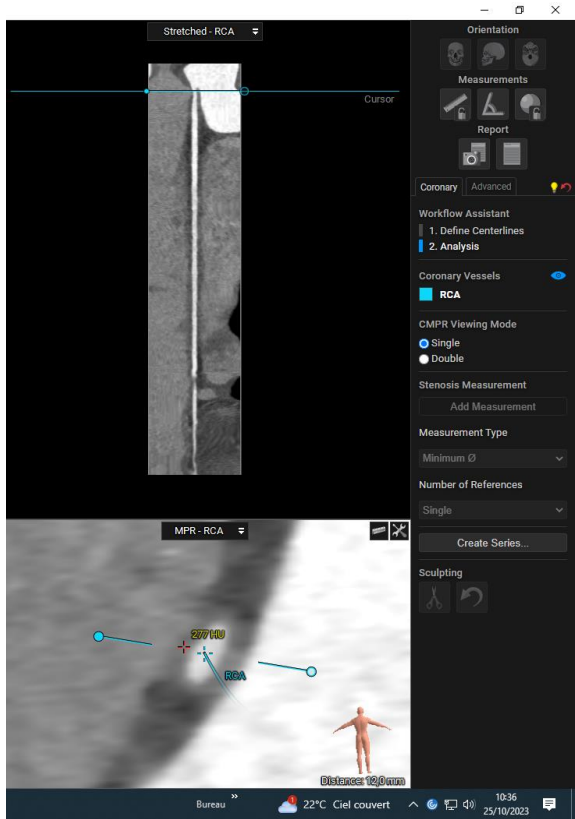
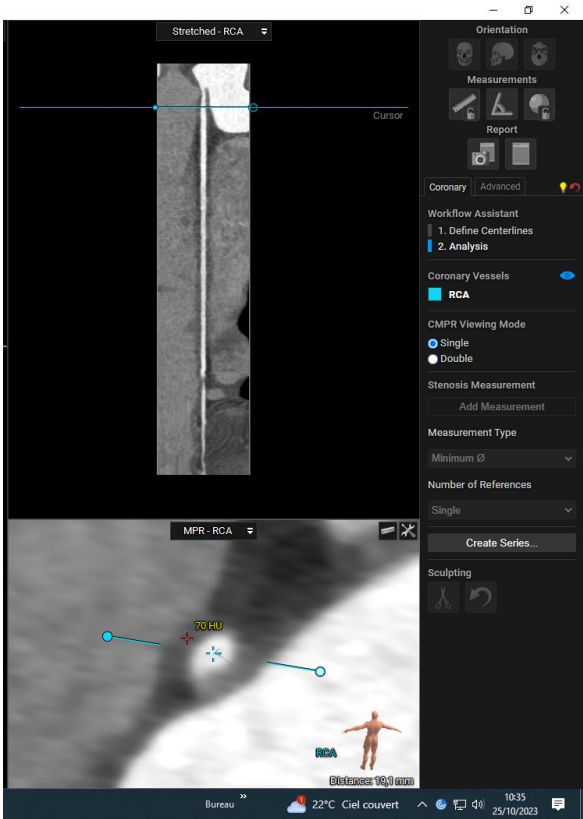
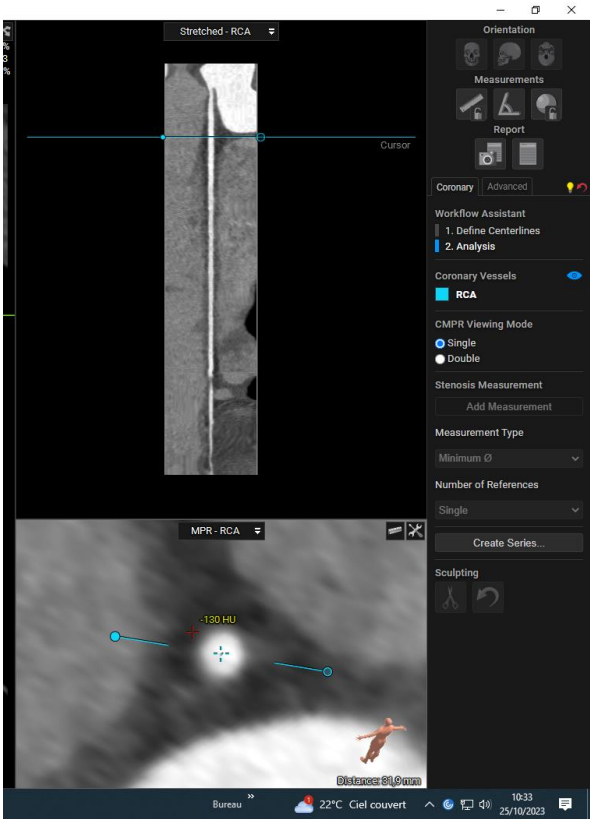


- — — prépulmonaire
- — — interartériel (préaortique)
- — — rétroaortique

Adaptation vasculaire



Adaptation vasculaire



- Embryologie et anatomie
- **Classification anatomique**
- Classification clinique et fonctionnelle
- Classification pronostique

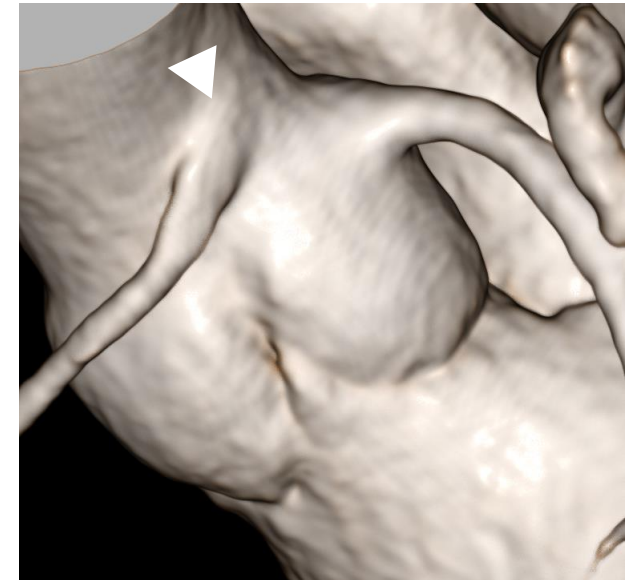
Prévalence selon le type d'imagerie



Echocardiographie
0.2%



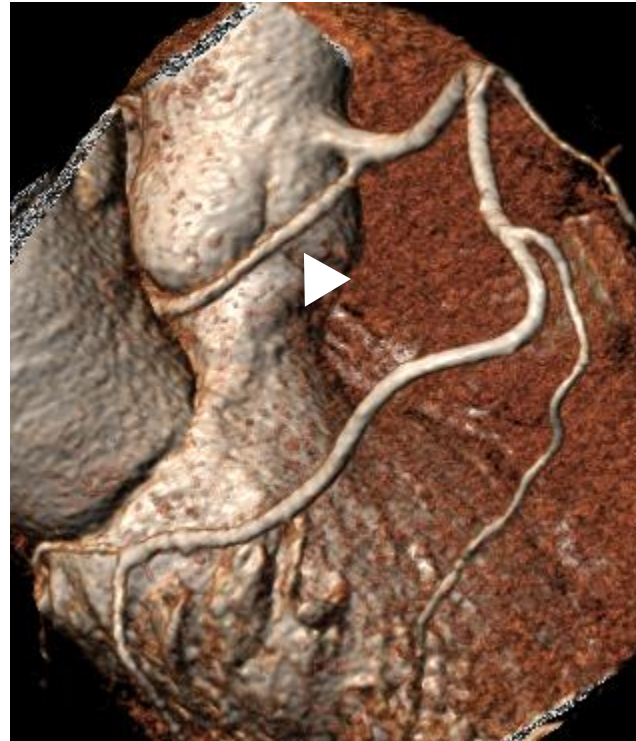
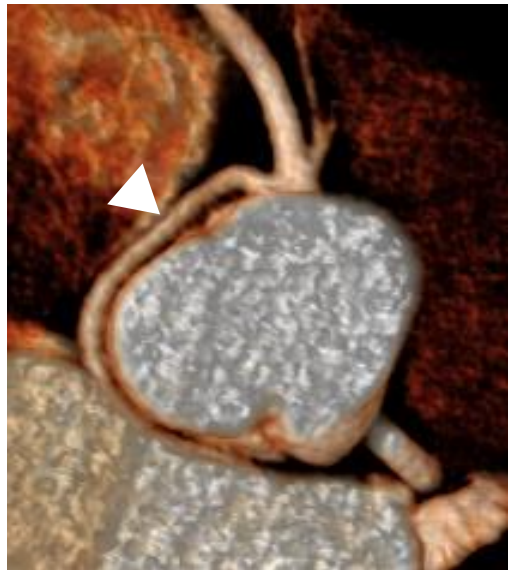
Coronarographie
0.8%



Scanner
1.0%

Prévalence angiographique selon l'artère coronaire **50%**

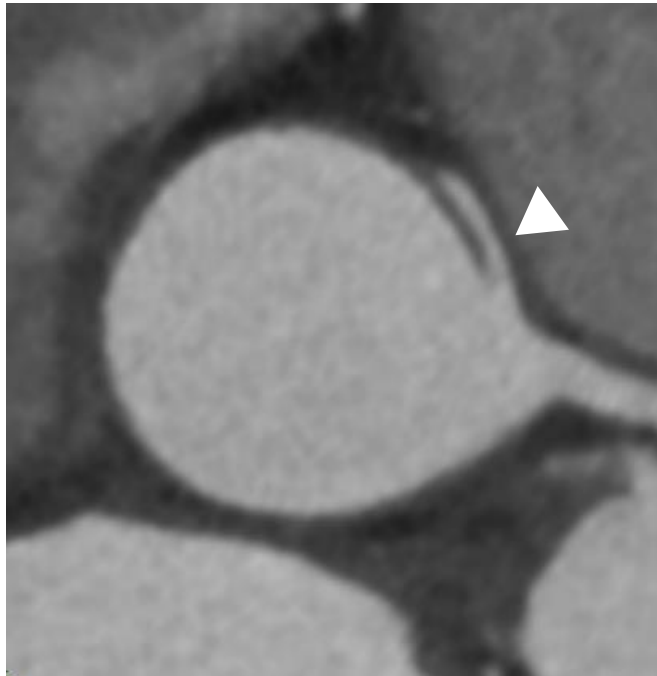
Circonflexe



Prévalence selon le trajet ectopique : rétroaortique **99%**

Prévalence angiographique selon l'artère coronaire **30%**

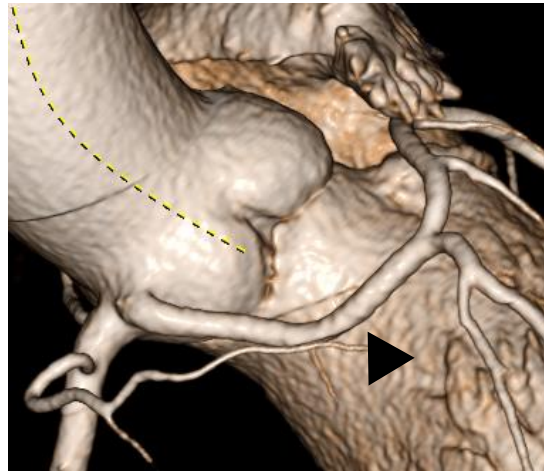
Droite



Prévalence selon le trajet ectopique : interartériel **95%**

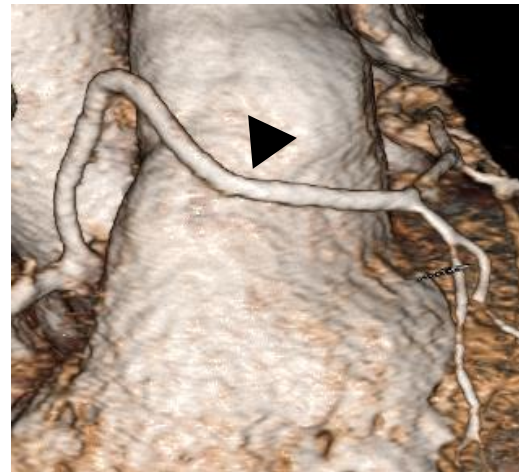
Prévalence angiographique selon l'artère coronaire **20%**

Tronc
IVA



Rétropulmonaire

45%



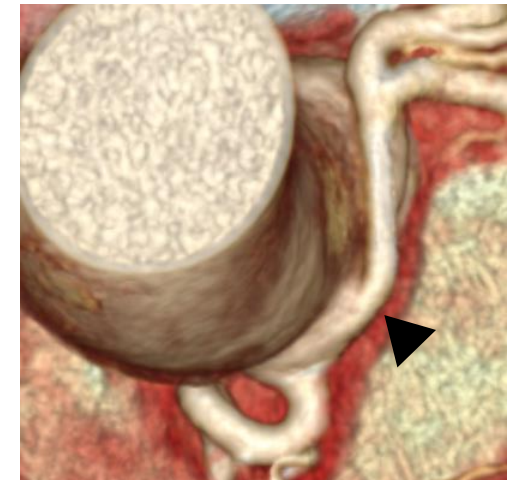
Prépulmonaire

30%



Rétroaortique

15%



Interartériel

10%

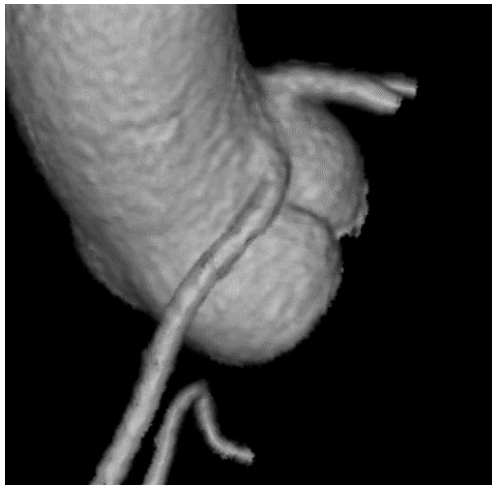
Prévalence selon le trajet ectopique : variable

Prévalence angiographique toutes anomalies de connexion $\approx 0.9\%$

Prévalence angiographique selon le trajet

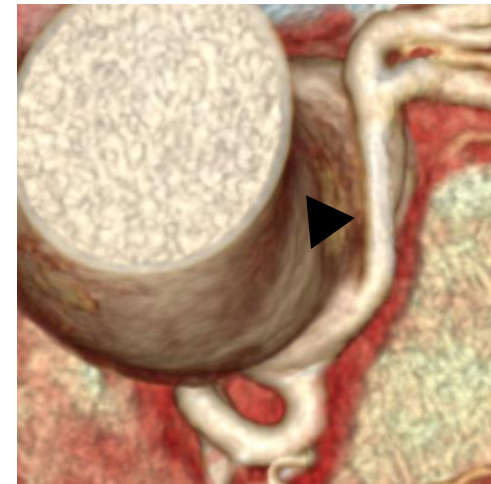
Prévalence anomalies avec trajet interartériel $\approx 0.3\%$

Droite



28%

Gauche



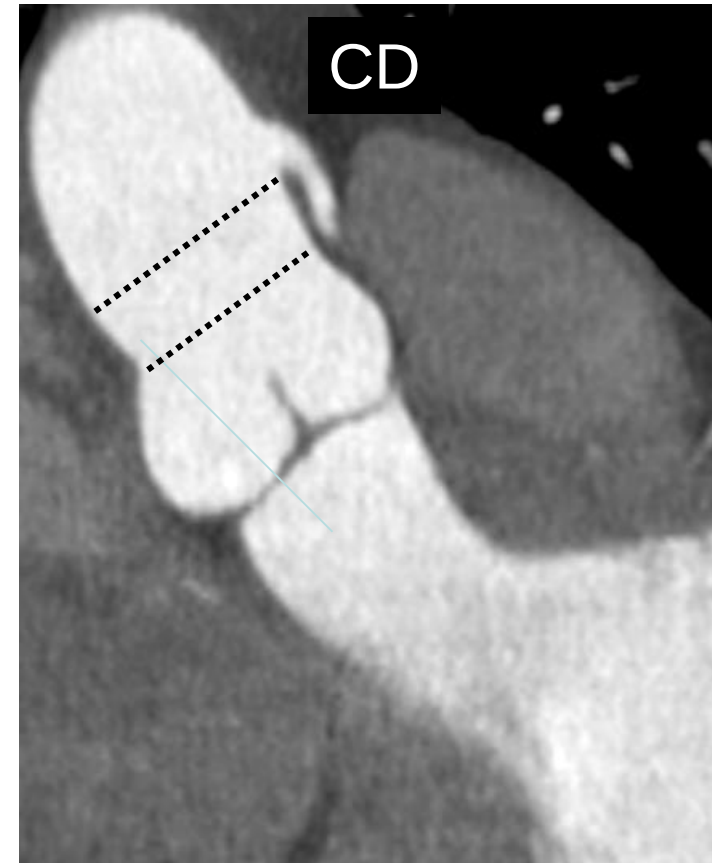
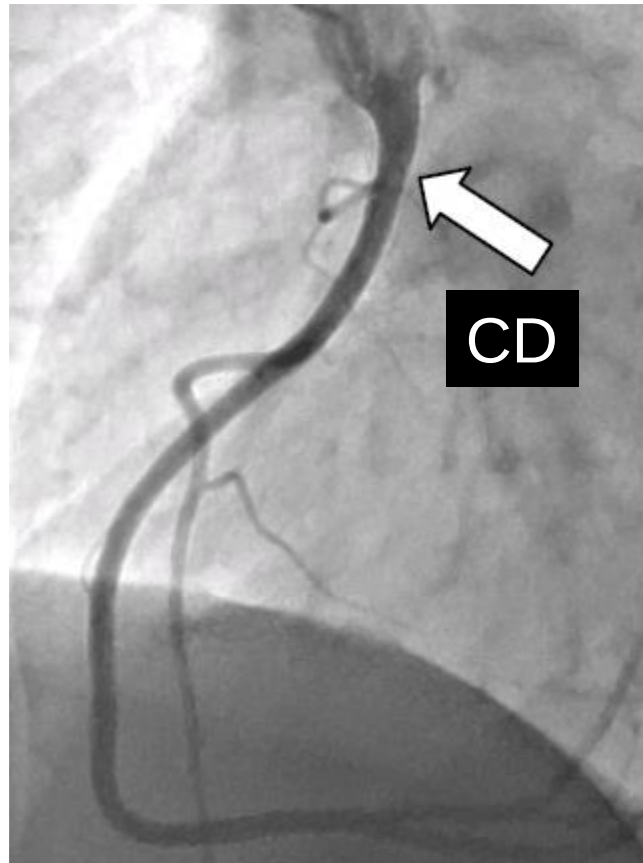
2%

Prévalence selon le site de connexion

site de connexion	%
connexion dans sinus controlatéral	47.0
connexion dans artère controlatérale	43.5
connexion au-dessus jonction sinotubulaire	1.0
connexion anormale dans sinus habituel	1.0
artère coronaire unique	1.0
connexion avec artère pulmonaire	1.0
connexion dans sinus non coronaire	0.4
autres connexions anormales	0.1

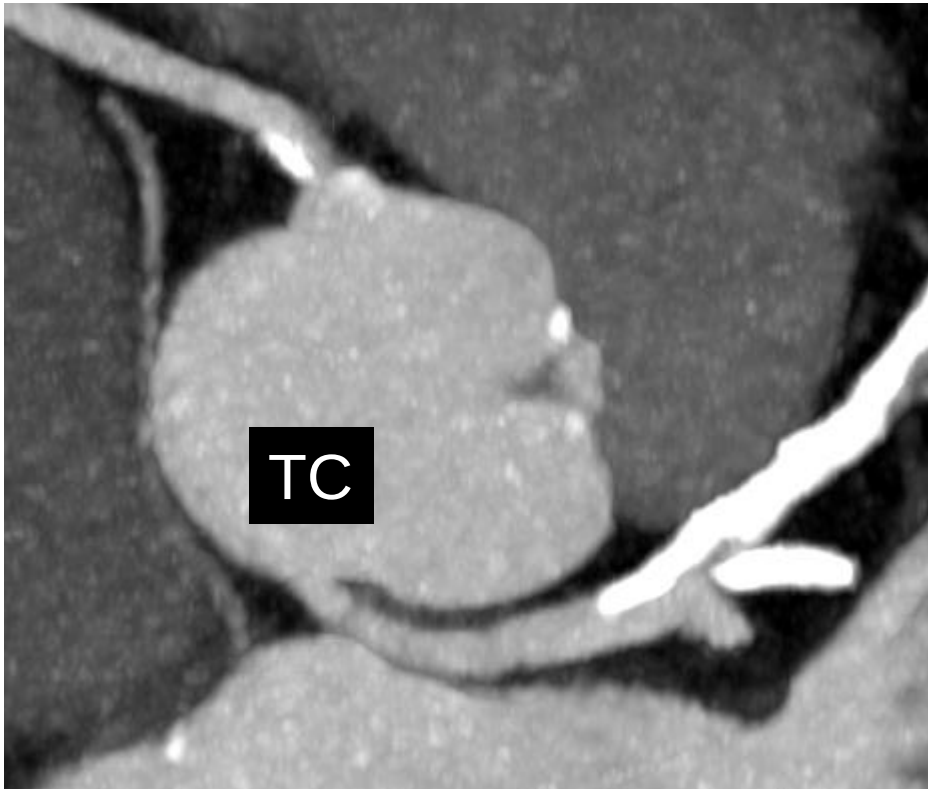
* à partir des données du registre ANOCOR (ESC 2015)
472 patients – 496 anomalies coronaires

Connexion aortique haute

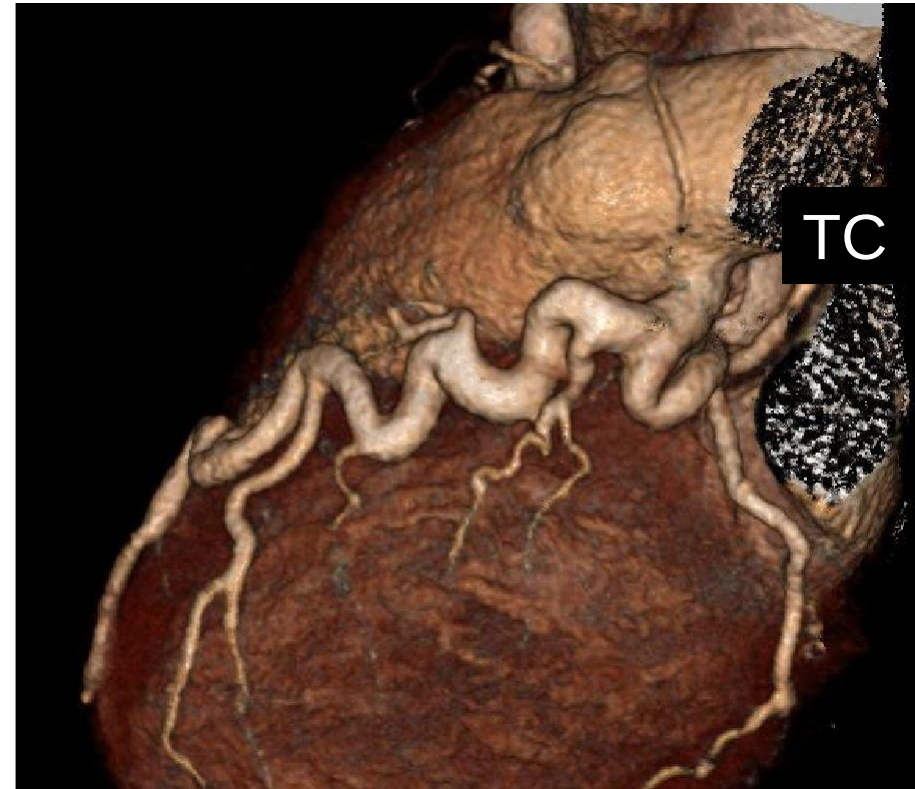


> 5 mm
High take-off

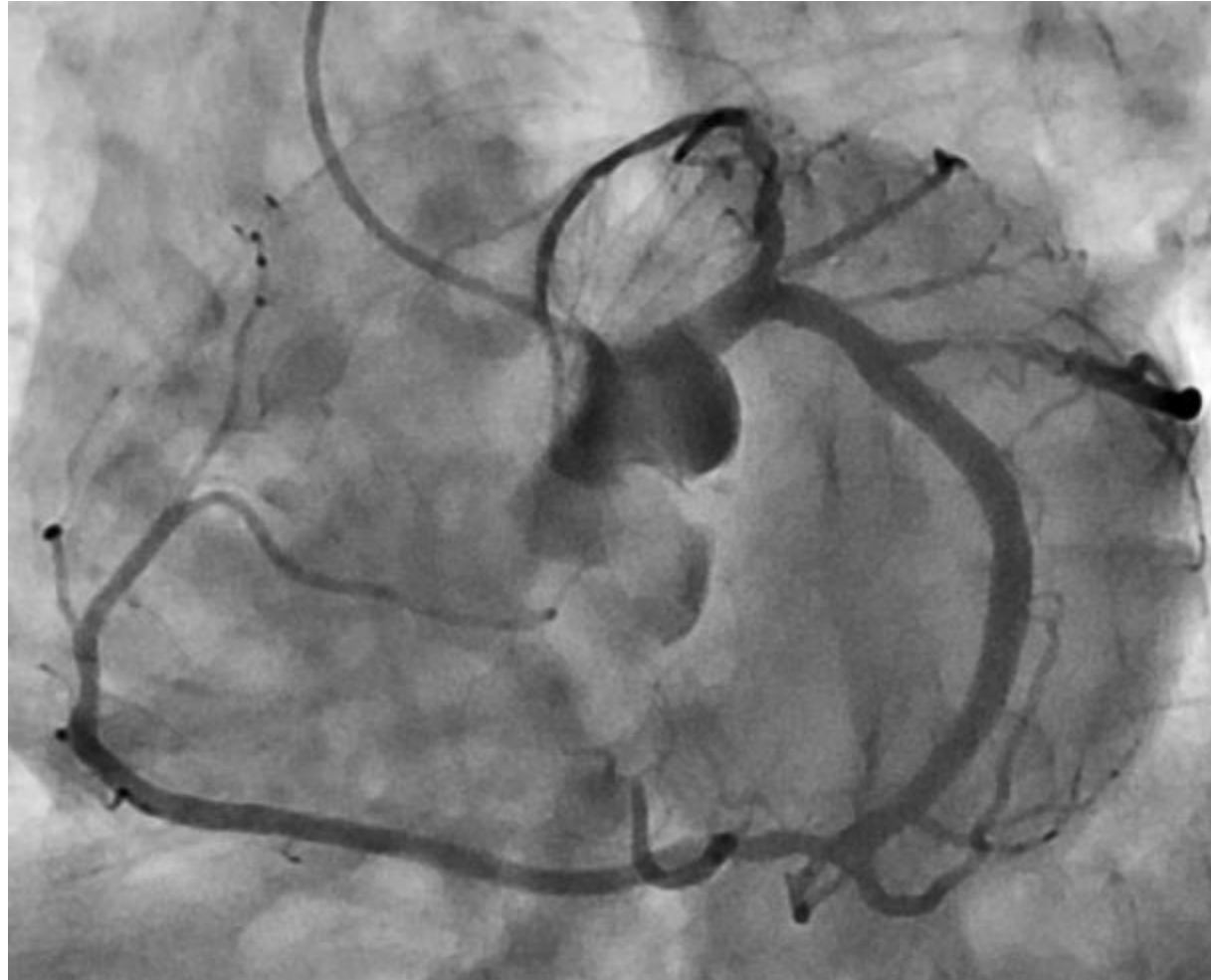
Connexion sinus non-c coronaire



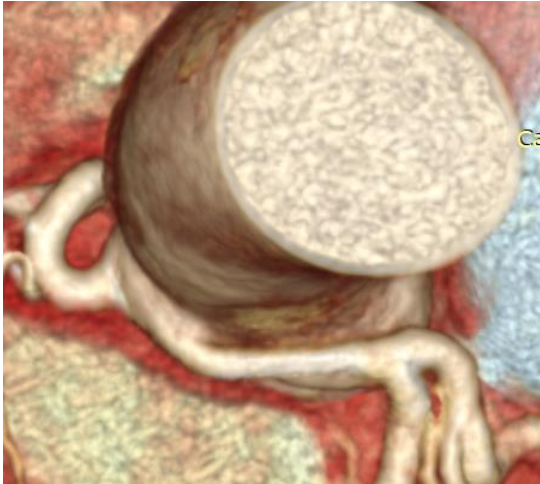
Connexion pulmonaire



Artère coronaire unique



Classification du trajet (tronc/IVA)



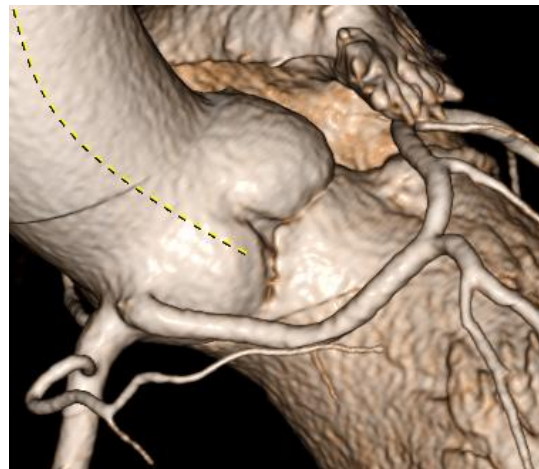
Trajet prépulmonaire

Trajet rétroaortique

Trajet interartériel

Trajet rétropulmonaire

Piège à éviter



Received: 11 October 2016 | Revised: 21 February 2017 | Accepted: 28 May 2017
DOI: 10.1111/chd.12504

ORIGINAL ARTICLE

WILEY  Congenital Heart Disease

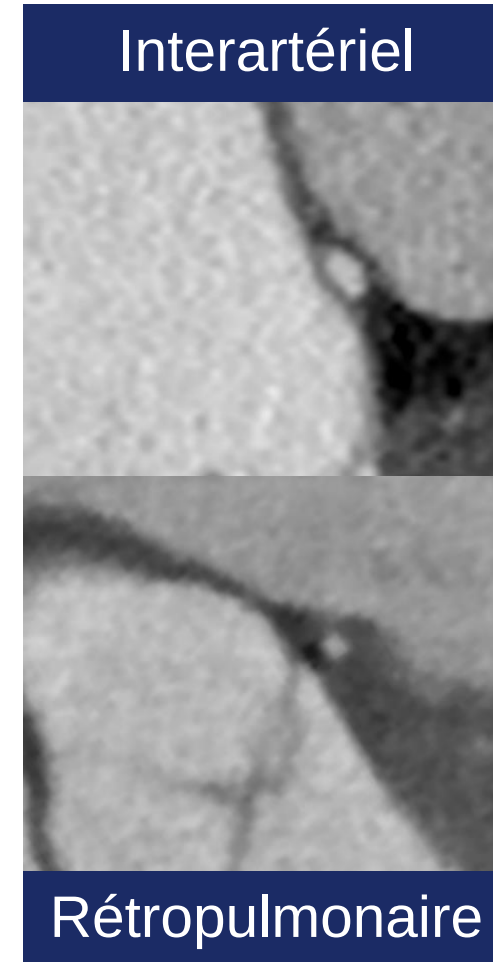
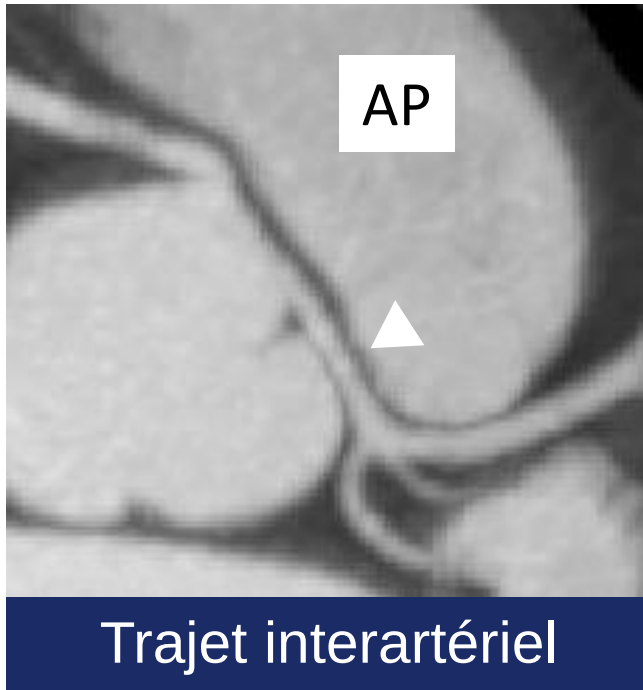
Interobserver variability in the classification of congenital coronary abnormalities: A substudy of the anomalous connections of the coronary arteries registry

Athanasios Koutsoukis, MD¹ | Xavier Halna du Fretay, MD² | Patrick Dupouy, MD³ | Phalla Ou, MD, PhD⁴ | Jean-Pierre Laissy, MD, PhD⁴ | Jean-Michel Juliard, MD⁵ | Fabien Hyafil, MD⁶ | Pierre Aubry, MD⁵  | on behalf of the ANOCOR Investigators*

Congenital Heart Disease 2017

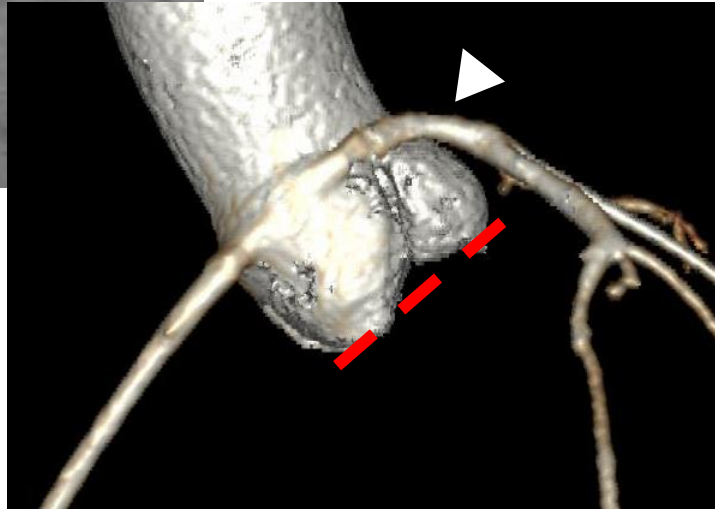
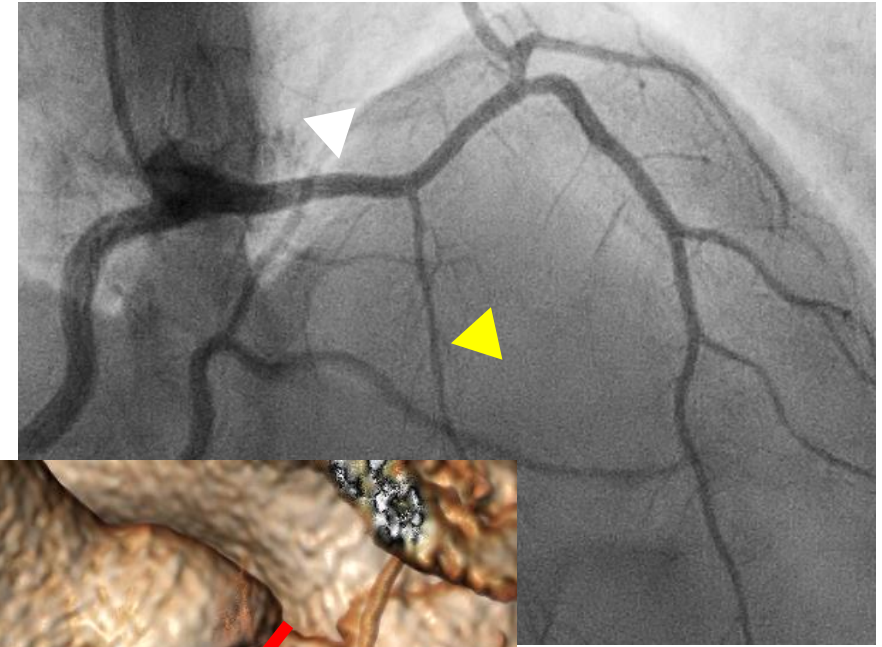
Classification du trajet (tronc/IVA)

Formes anatomiques à ne pas confondre

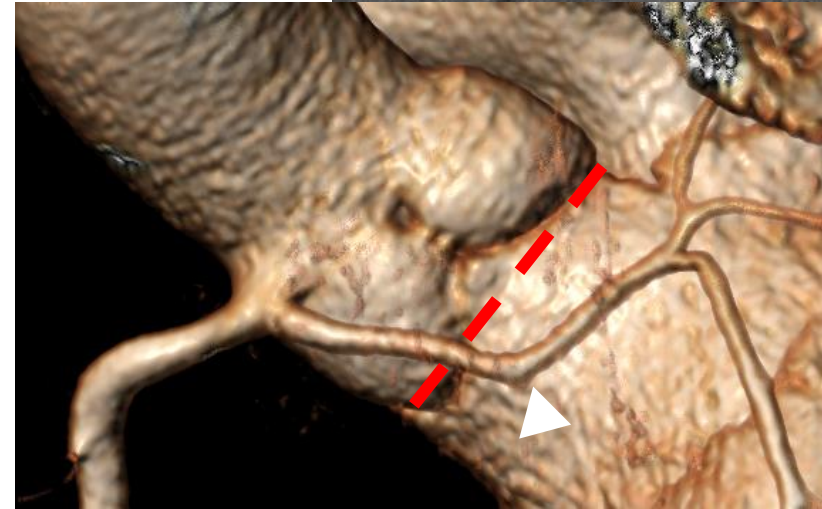




ANOCOR gauches



Trajet interartériel



Trajet rétropulmonaire

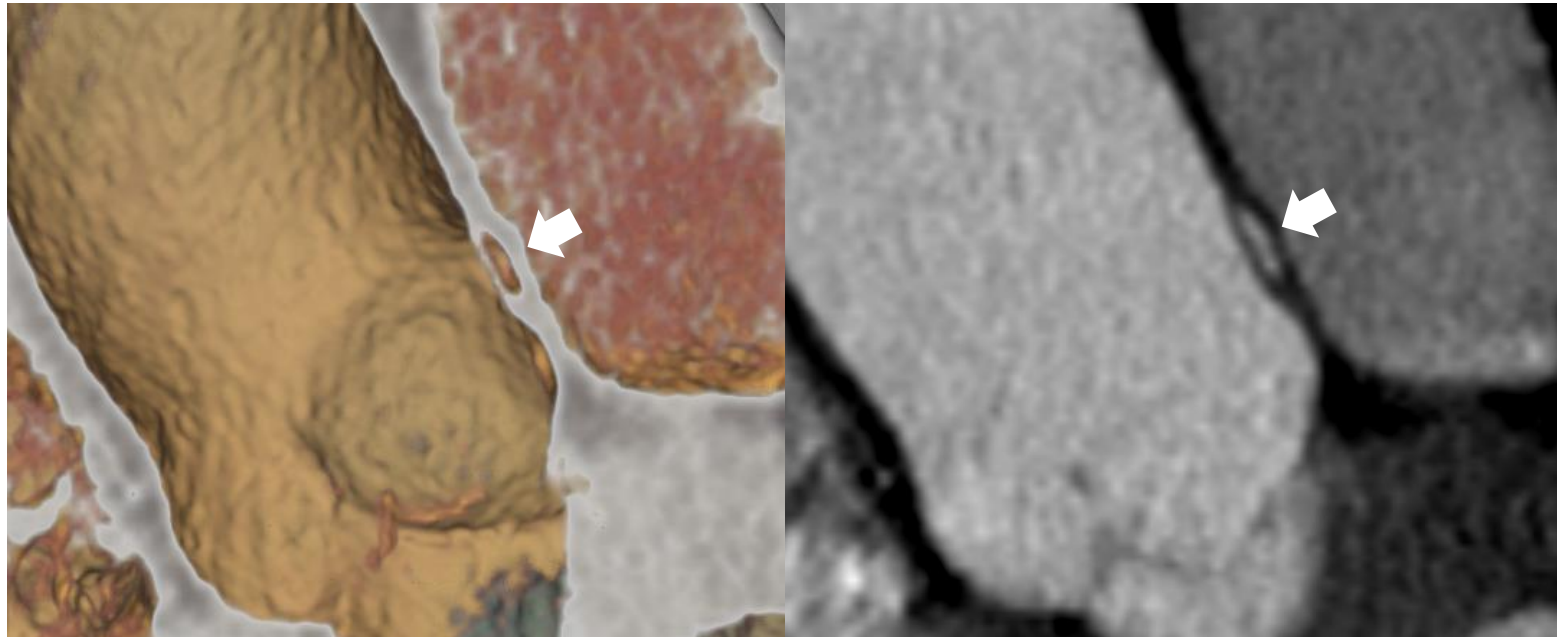
Passage intramyocardique



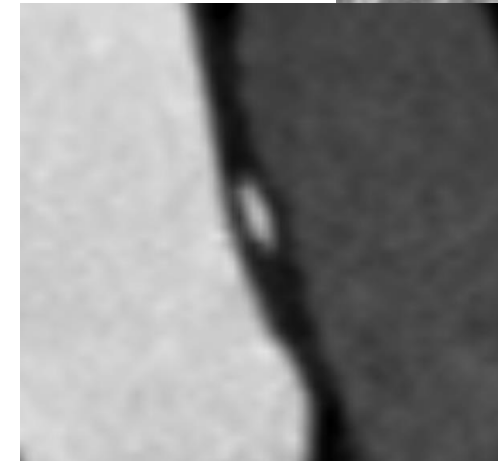
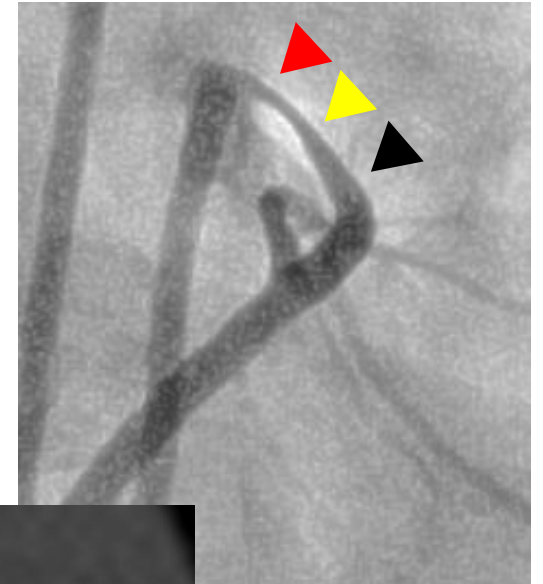
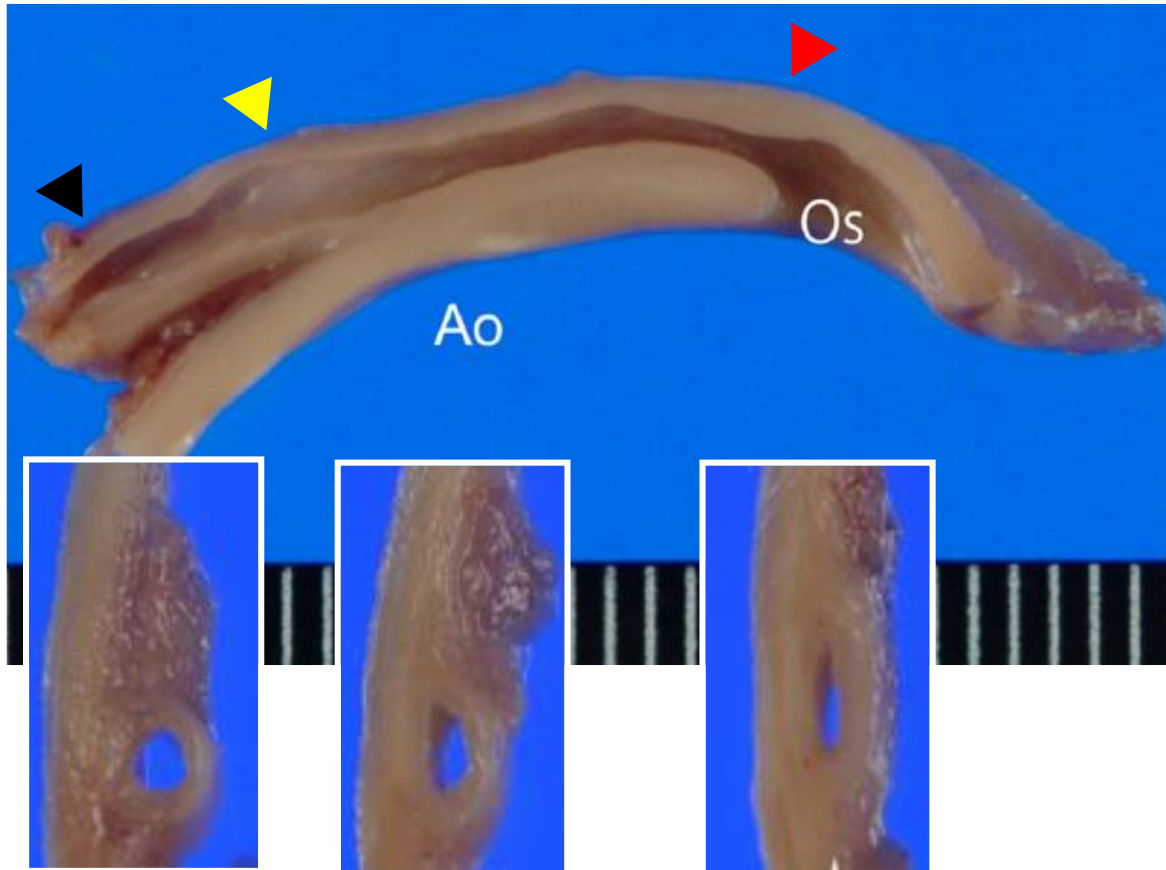
Tronc commun/IVA
Trajet rétropulmonaire

Passage intramural aortique

Tronc commun
Droite
Trajet interartériel



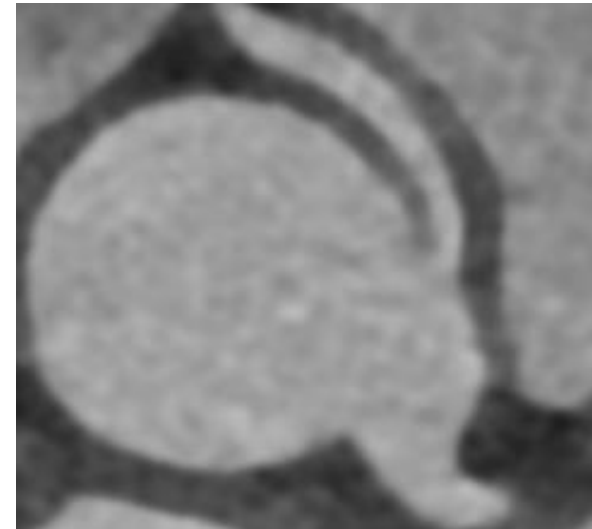
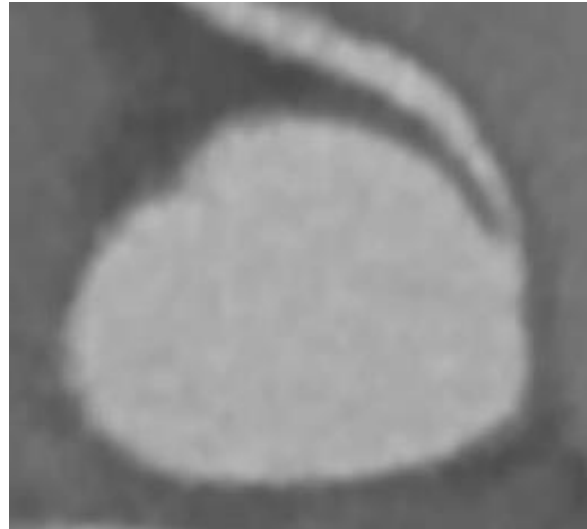
Passage intramural aortique



Right ANOCOR with an intramural course
Hata Y et al. Cardiovasc Pathol. 2014.

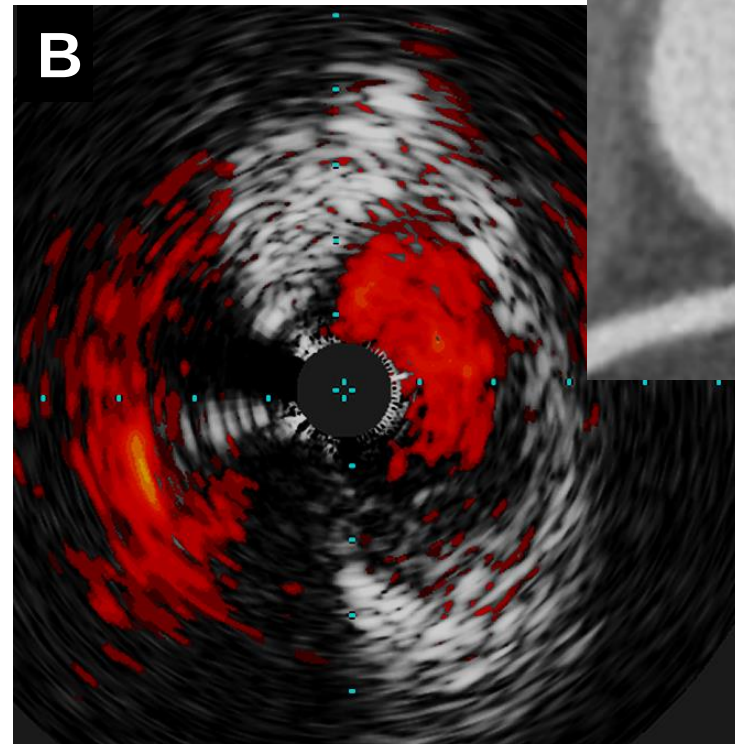
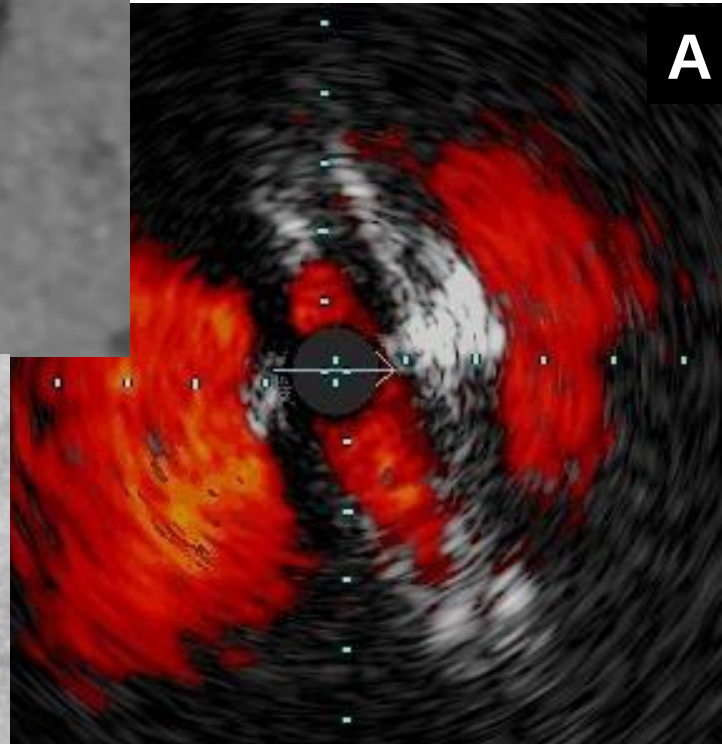
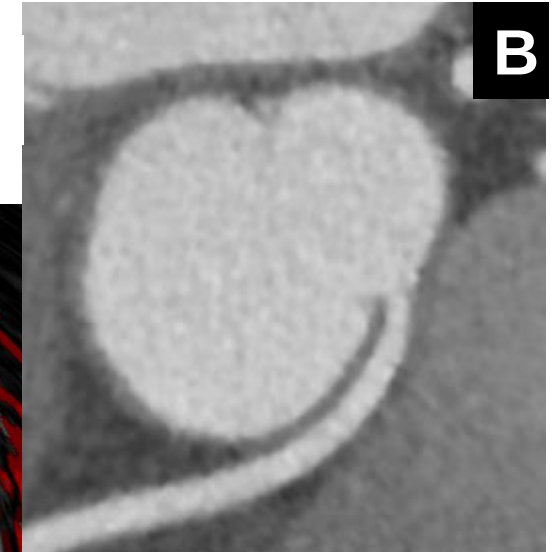
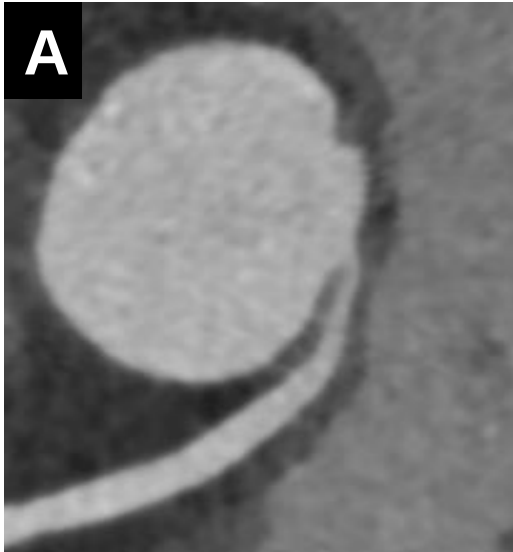
Passage intramural aortique

Droite
Trajet interartériel



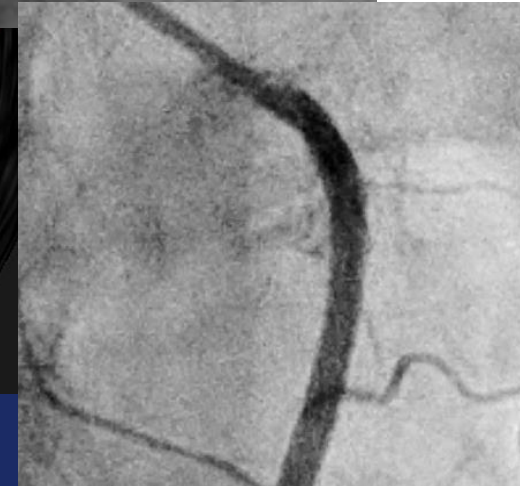
Passage intramural aortique

Echographie endocoronaire



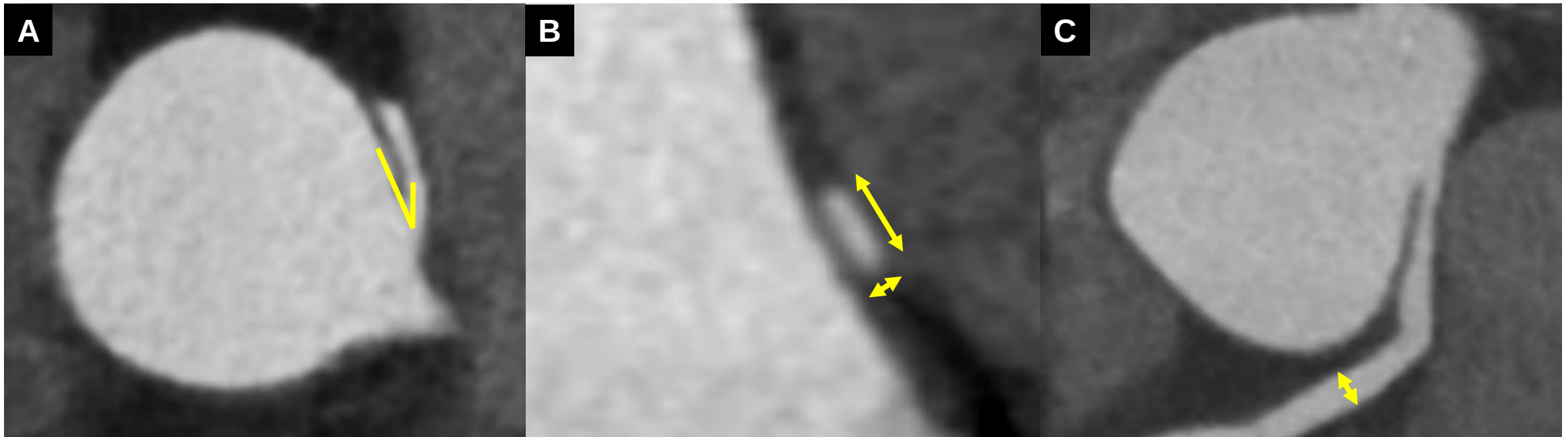
Passage intramural (+)

Passage intramural (-)



ANOCOR droite avec trajet interartériel

Analyse tomographique



Angle connexion

Degré d'excentricité : GA/PA

Réduction de diamètre et de surface

ANOCOR avec trajet interartériel

Critères de sévérité anatomique

- Degré d'excentricité (grand axe/petit axe) ≥ 2.0
- Angle de connexion $\leq 35^\circ$
- Réduction de diamètre $\geq 50\%$
- Réduction de surface $\geq 50\%$

- Embryologie et anatomie
- Classification anatomique
- Classification clinique et fonctionnelle
- Classification pronostique

Classification clinique

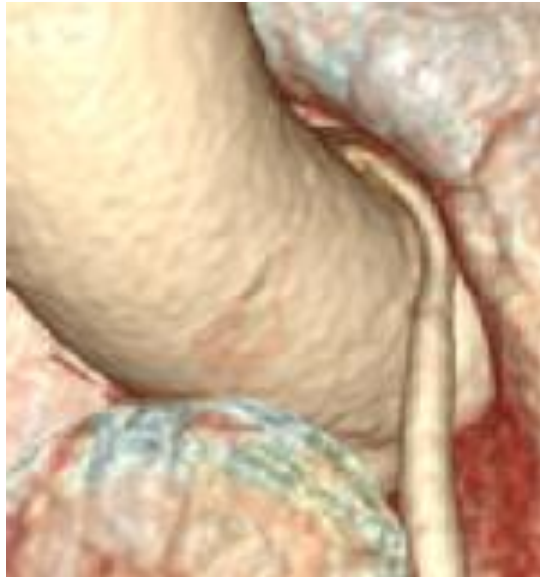
Présentation initiale

- Mort subite/arrêt cardiaque récupéré
- Symptômes d'allure ischémique (angor/lipothymie/syncope/dyspnée)
- Asymptomatique (échocardiogramme/scanner coronaire)
- SCA
- Palpitations

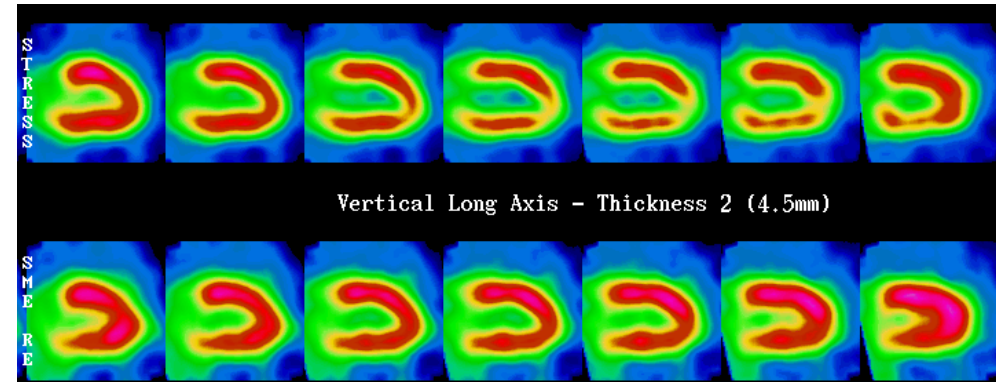
Lien avec effort physique sportif +++

Classification fonctionnelle

Recherche d'ischémie myocardique



Ischémie myocardique ⊕

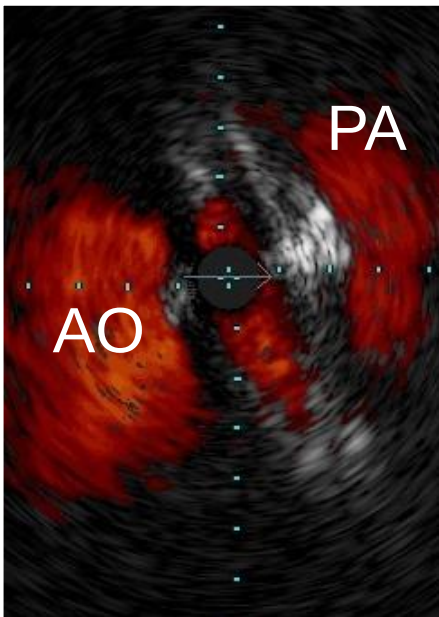


Prévalence ≈ 10%

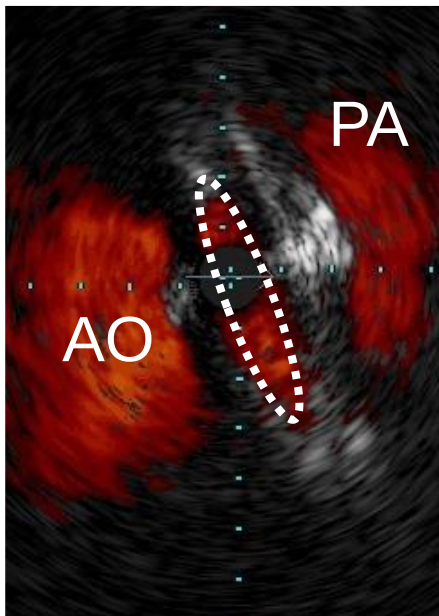
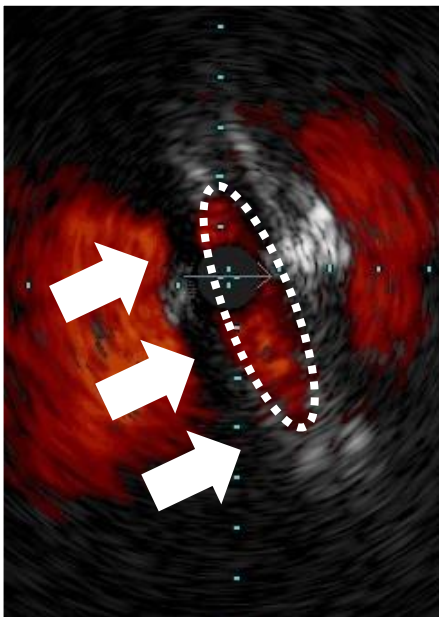
Ischémie myocardique

Two-Tier Concept

Fixed Component



Dynamic Component



Strenuous Exertion

Wall stress ↑

Reduction in lumen area : 35-65%

Bigler MR. et al. Front Cardiovasc Med. 2021.

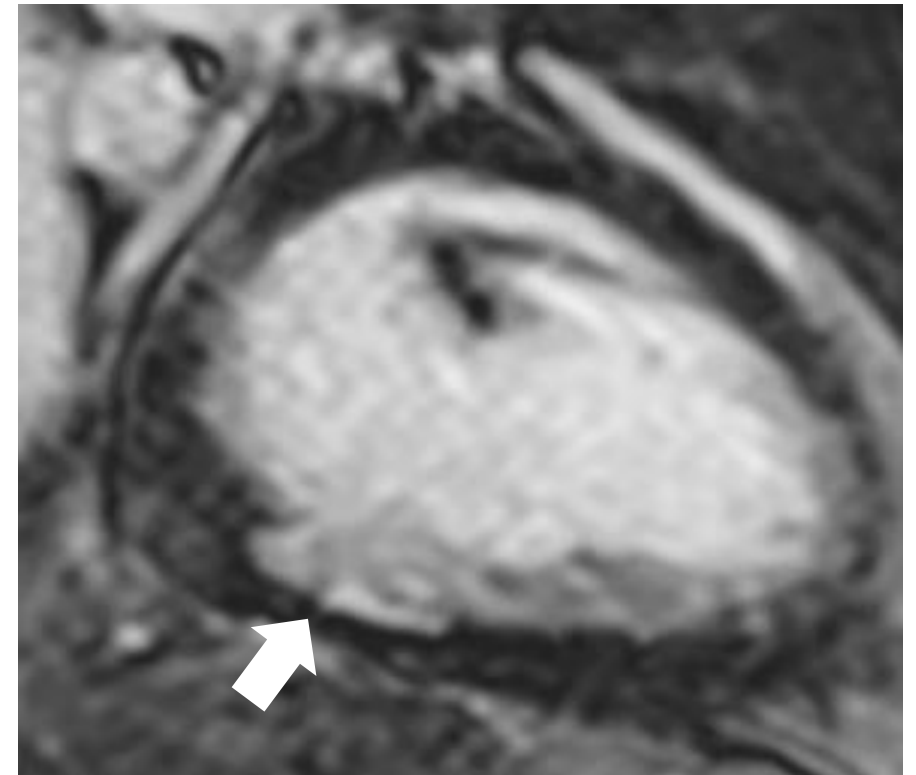
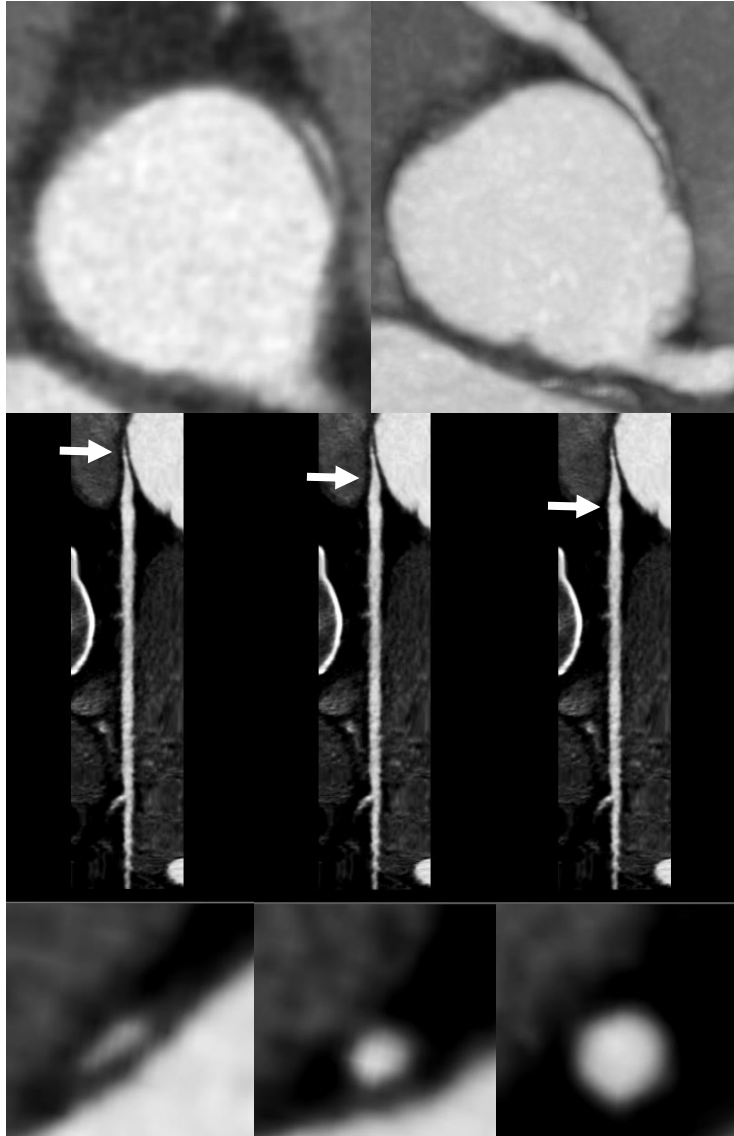
Recherche d'ischémie myocardique

TABLE 3 | Overview of possible stress protocols in assessing patients with ACAOS.

	Physical exercise		Adenosine	Regadenoson	Norepinephrine	Dobutamine	Dobutamine + volume challenge
Protocol/dose	85% of max. HR	100% of max. HR	140 µg/kg/min	Bolus: 400 µg	0.01 µg/kg/min	40 µg/kg/min	40 µg/kg/min + saline: 1.5–3 l + atropine: 1 mg
Applied in	Non-invasive testing	Non-invasive testing	Non-invasive / invasive testing	Non-invasive testing	Invasive testing	Non-invasive / invasive testing	Invasive testing
Increase in coronary blood flow to detect relevant fixed stenosis	+++	+++++	+++	+++	++	++++	++++
Increased heart minute volume to provoke dynamic lateral compression	++	+++++	-	-	+++	++	++++
Reproducibility of symptoms	+++	+++++	-	-	++	++	+++
Tolerability	++++	++++	++	+++	++	++	++

HR, heart rate.

Recherche de nécrose myocardique

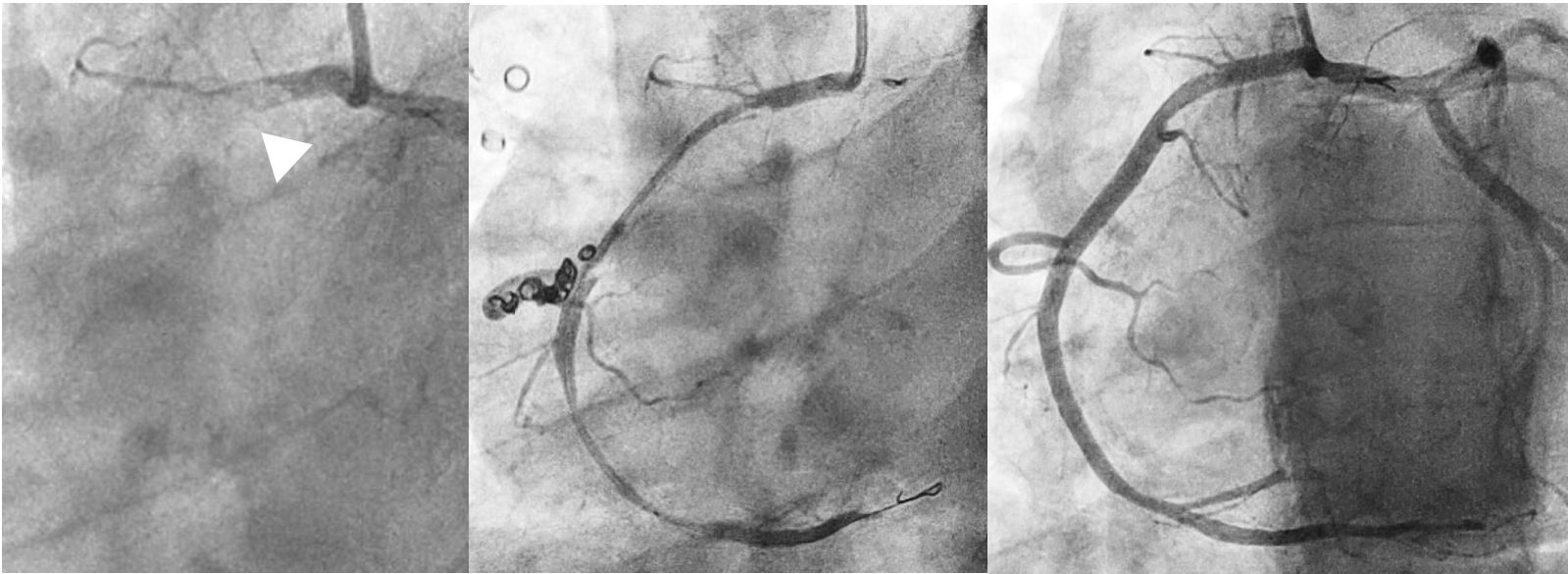


IRM cardiaque

Classification

Lien de causalité

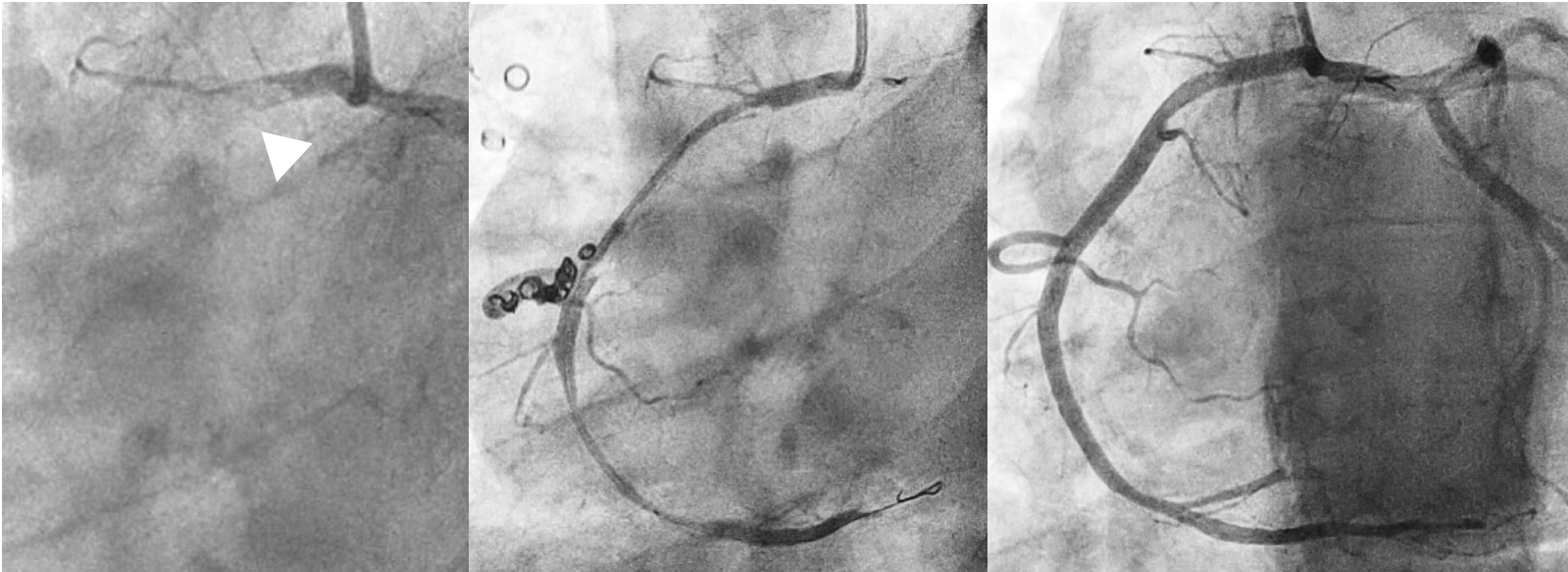
Homme de 35 ans – Maladie Rendu-Osler – MAV cérébrales/pulmonaires
SCA ST+ inférieur lors activité sportive



Classification

Lien de causalité

Homme de 35 ans – Maladie Rendu-Osler – MAV cérébrales/pulmonaires
SCA ST+ inférieur lors activité sportive



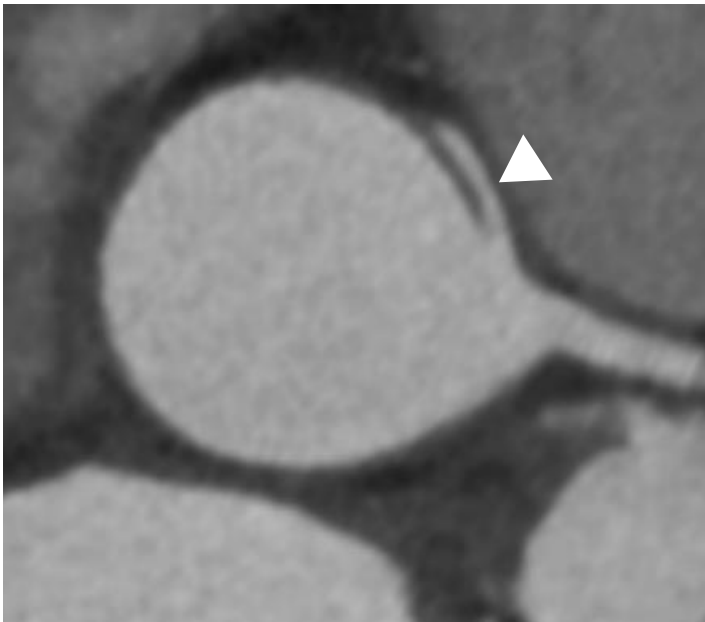
Diagnostic d'embolie paradoxale sur MAV pulmonaires

- Embryologie et anatomie
- Classification anatomique
- Classification clinique et fonctionnelle
- **Classification pronostique**

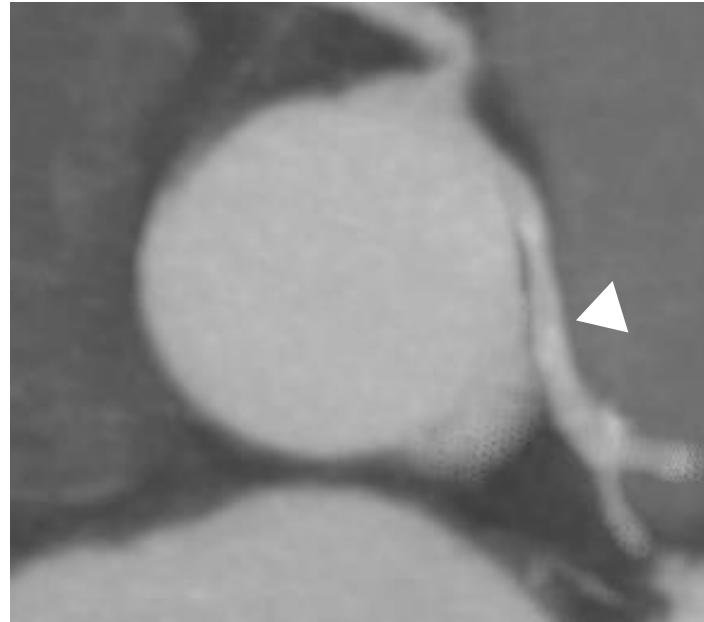
ANOCOR à risque mort subite/arrêt cardiaque/ischémie myocardique

Connexion aortique avec trajet interartériel

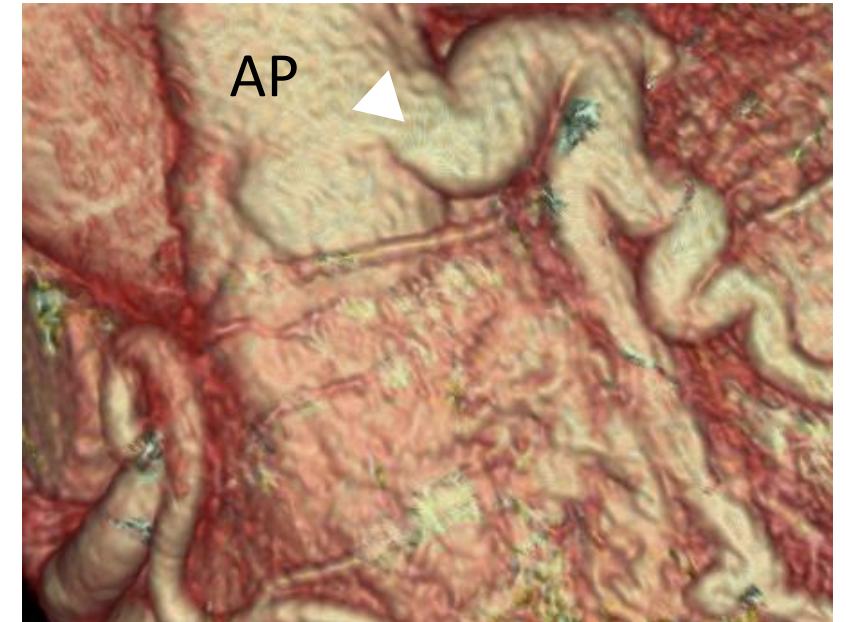
Connexion pulmonaire



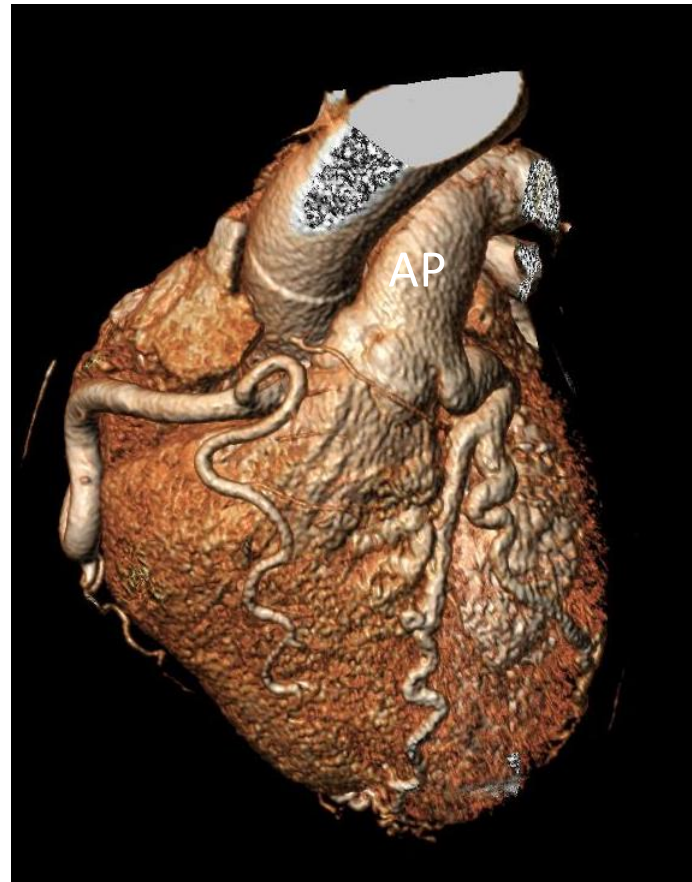
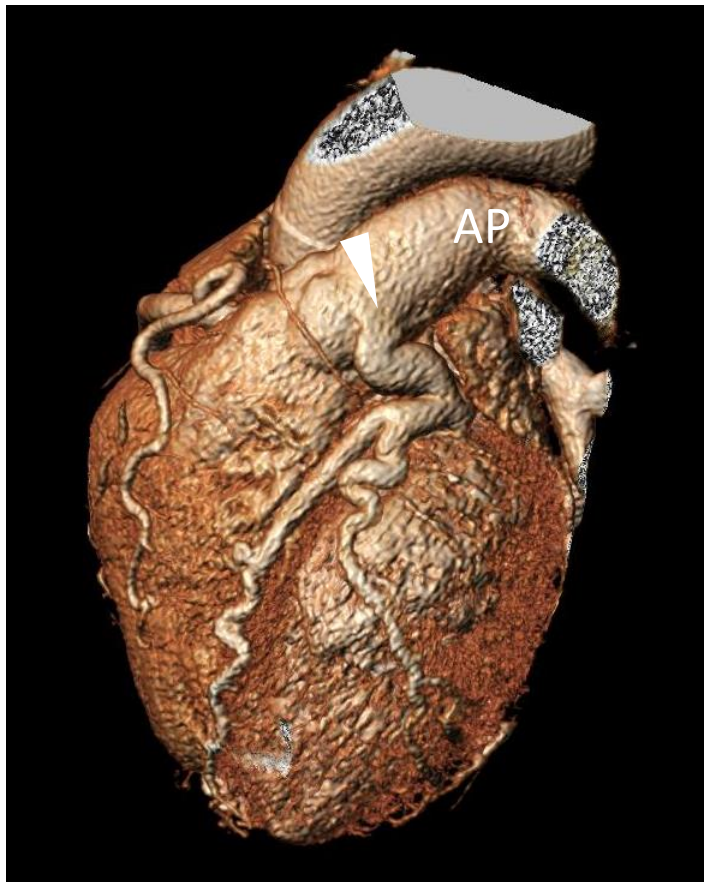
ANOCOR droite



ANOCOR gauche

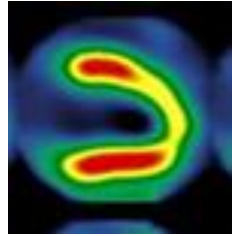


Connexion pulmonaire

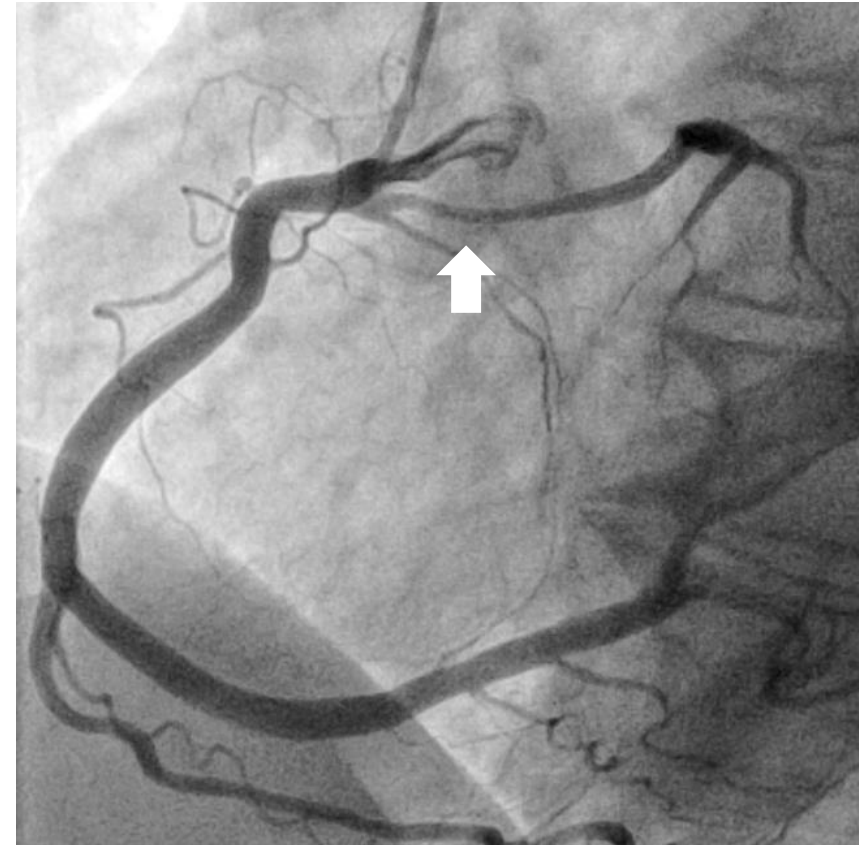
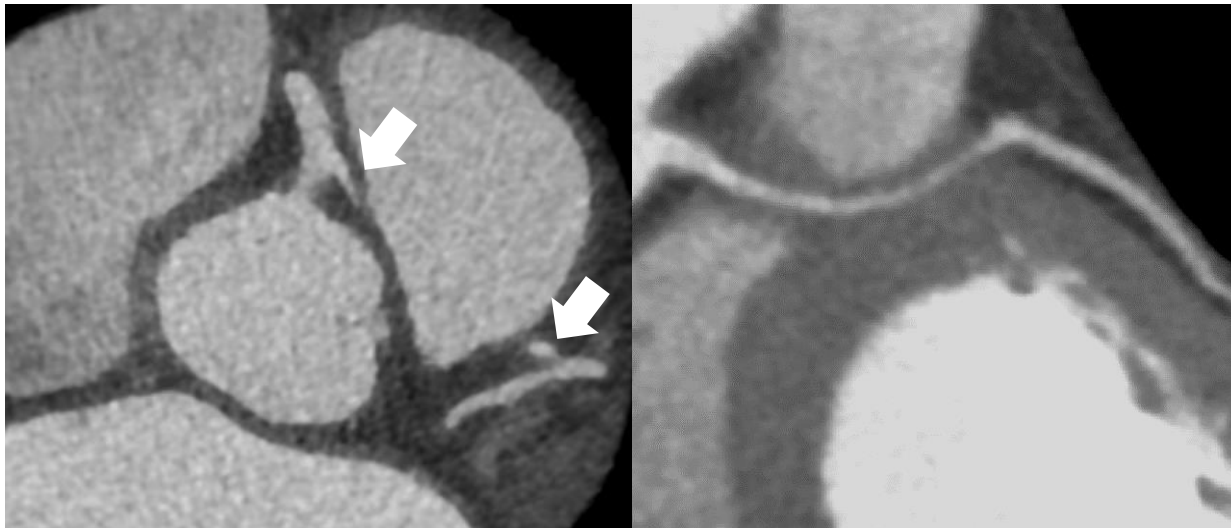


- Découverte exceptionnelle chez l'adulte
- Droite > IVA > Tronc commun > Circonflexe
- Dilatation coronaire (2)
- Cardiomyopathie ischémique
- VG dilaté et hypokinétique
- Insuffisance mitrale possible
- Possible séquelle de nécrose/fibrose
- Hypoperfusion myocardique chronique
- Mort subite/AC récupéré (gauche > droite)

ANOCOR à risque d'ischémie myocardique

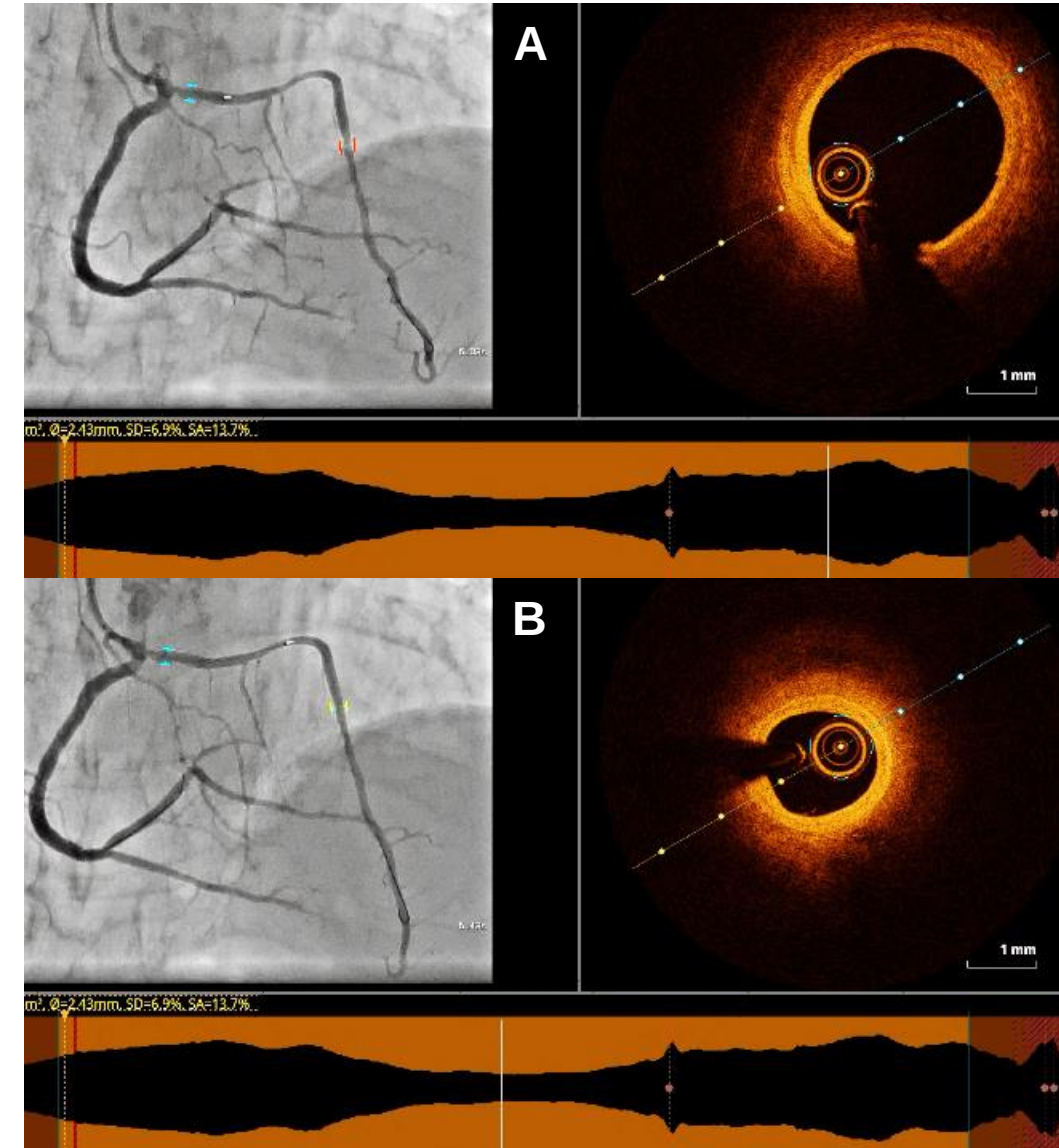
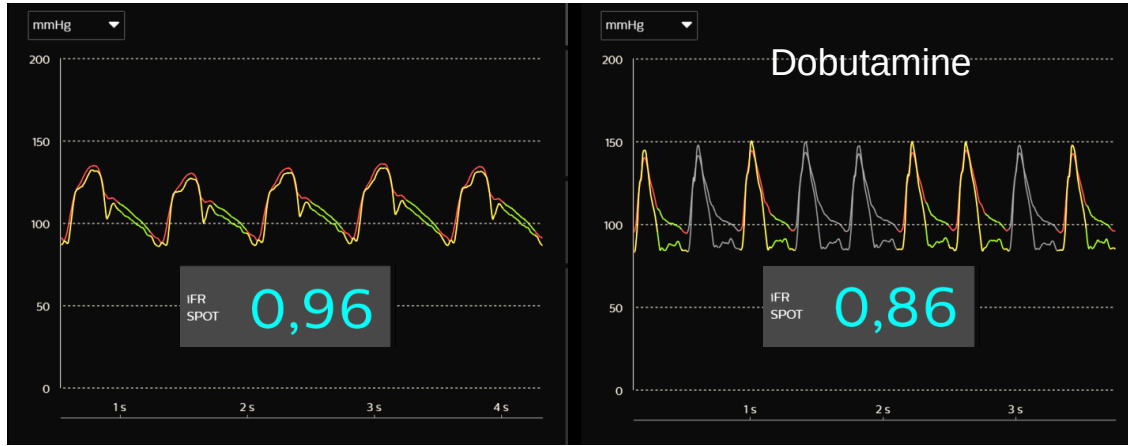


ANOCOR gauche avec trajet rétropulmonaire



Anomalies coronaires congénitales de l'adulte

ANOCOR gauche avec trajet rétropulmonaire



ANOCOR et risque de mort subite

Cardiopathie congénitale à risque de mort subite	Prévalence**
ANOCOR* droite	0.3%
Cardiomyopathie hypertrophique	0.2%
Syndrome pré-excitation ventriculaire	0.15%
Syndrome de QT long	0.05%
Cardiomyopathie dilatée idiopathique	0.04%
Dysplasie ventriculaire droite arythmogène	0.04%
ANOCOR* gauche	0.03%
Syndrome de Brugada	0.02%
Tachycardie ventriculaire catécholergique	0.01%

* Anomalie de connexion aortique avec trajet interartériel

** Nombre de cas à la naissance (estimations)

ANOCOR et risque de mort subite

Cardiopathie congénitale à risque de mort subite	Incidence annuelle**
Tachycardie ventriculaire catécholergique	1.5%
Cardiomyopathie hypertrophique	1-2%
Syndrome de Brugada	1%
Syndrome de QT long	0.5-1%
Cardiomyopathie dilatée idiopathique	0.5-1%
Dysplasie ventriculaire droite arythmogène	0.5-1%
ANOCOR* gauche	0.2%
Syndrome pré-excitation ventriculaire	0.1%
ANOCOR* droite	0.02%

* Anomalie de connexion avec trajet interartériel

** Incidence annuelle de mort subite (estimations)

2020 Guidelines for Adult Congenital Heart Disease

Anomalous aortic origin of the coronary artery		
Surgery is recommended for AAOCA in patients with typical angina symptoms who present with evidence of stress-induced myocardial ischaemia in a matching territory or high-risk anatomy. ^c	I	C
Surgery is not recommended for AAORCA in asymptomatic patients without myocardial ischaemia and without high-risk anatomy. ^c	III	C

^cHigh-risk anatomy includes features such as an intramural course and orifice anomalies (slit-like orifice, acute-angle take-off, orifice >1 cm above the sinotubular junction).

Surgery should be considered in <i>asymptomatic</i> patients with AAOCA (right or left) and evidence of myocardial ischaemia.	IIa	C
Surgery should be considered in <i>asymptomatic</i> patients with AAOLCA and no evidence of myocardial ischaemia but a high-risk anatomy. ^c	IIa	C
Surgery may be considered for symptomatic patients with AAOCA even if there is no evidence of myocardial ischaemia or high-risk anatomy. ^c	IIb	C
Surgery may be considered for <i>asymptomatic</i> patients with AAOLCA without myocardial ischaemia and without high-risk anatomy ^c when they present at young age (<35 years).	IIb	C

Baumgartner H et al. Eur Heart J. 2020.

Management of Adults With Anomalous Aortic Origin of the Coronary Arteries: State-of-the-Art Review

			L-AAOCA				R-AAOCA		
			Interarterial Course		Transseptal Course	Prepulmonic or Retroaortic Course	Interarterial Course		Prepulmonic or Retroaortic Course
			Long IM segment / concerning anatomic features*	Short IM segment			Long IM segment / concerning anatomic features*	Short IM segment	
Ischemic Symptoms / Positive Functional Testing									
Asymptomatic, Negative Functional Testing	18-35 years	High athletic identity / patient preference							
		Low athletic identity / patient preference							
	>35 years	High athletic identity / patient preference							
		Low athletic identity / patient preference							

This table is provided only as a guide. The specific decision should be made with the patient taking into account all individual factors and patient preference.
 *Concerning anatomic features include: slit-like orifice, proximal coronary narrowing, acute angle take-off, orifice >1 cm above the sinotubular junction. A long intramural segment is defined as that which allows repositioning of the coronary ostium to the correct sinus away from the intercoronary commissure or pillar during simple unroofing.



+

Recommendation of Surgical Intervention

-

Consider Exercise Restriction Until Surgical Intervention or If No Surgical Intervention

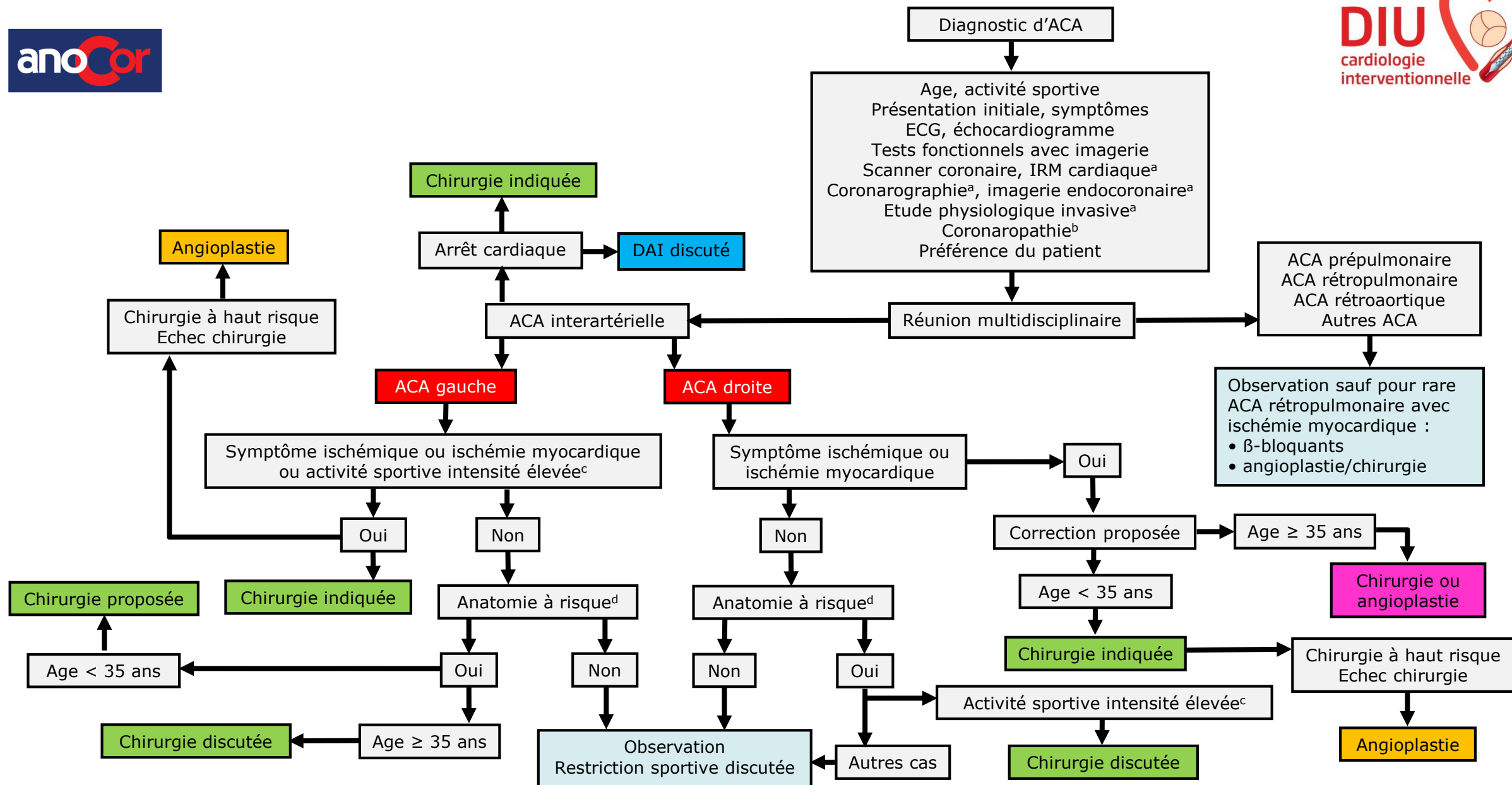
No Exercise Restriction

Surgical Intervention Not Offered

Consider Surgical Intervention or Trial of Beta-Blockers

Ischemic Symptoms and Positive Functional Testing Uncommon. Evaluate for Alternate Etiologies (eg, Coronary Atherosclerosis) and Perform Individualized Decision-Making Based on Patient-Specific Anatomy

FIGURE 5 Shared decision-making tool for patients with anomalous aortic origin of the coronary arteries. This figure is provided only as a guide. The specific decision should be made with the patient by taking into account all individual factors and patient preference. (IM, intramural; L-AAOCA, anomalous aortic origin of the left coronary artery; R-AAOCA, anomalous aortic origin of the right coronary artery.) Modified with permission from Dell Medical School at The University of Texas at Austin (© 2020).



^a Optionnel.

^b Stratégie de revascularisation à adapter en cas de maladie coronaire associée.

^c Activité sportive d'intensité élevée selon la classification des recommandations européennes.

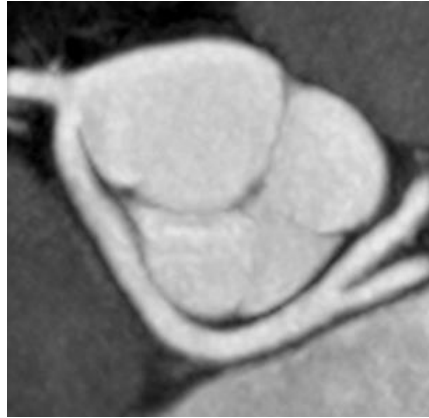
^d Angle de connexion < 45°, forme elliptique de l'ostium, réduction de diamètre ≥ 50% ou passage intramural aortique.

ACA : anomalie de connexion aortique. ANOCOR : anomalies coronaires congénitales. DAI : défibrillateur automatique implantable. ECG : électrocardiogramme. IRM : imagerie par résonance magnétique.

Informations dans le compte-rendu de coronarographie

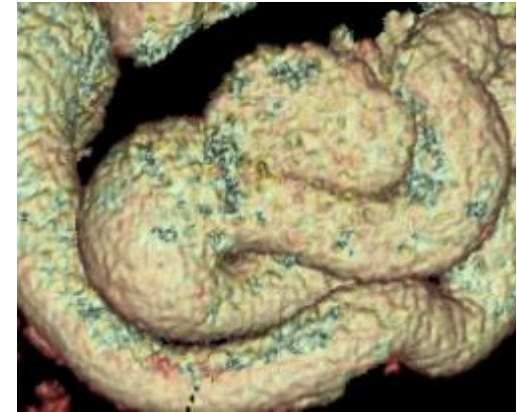
- Connexions anormales proximales
 - artère concernée
 - site de connexion
 - trajet probable par rapport à AO/AP
 - athérome coronaire associé
- Fistules coronaires
 - artère concernée
 - type proximal (A) ou distal (B)
 - site de connexion
 - taille : petite/intermédiaire/large
 - unique/multiple
 - morphologie (tortuosités/calcifcations)
- Trajet intramyocardique
 - artère concernée
 - présent/possible
 - écrasement systolique < ou > 50%

Résumé

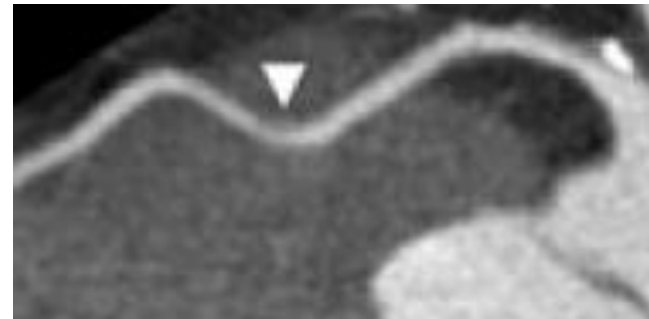


- Connexions anormales proximales
 - nombreuses formes anatomiques
 - trajet interartériel à reconnaître
 - aide de l'imagerie en coupe
 - classification multiple

- Anomalies de terminaison
 - très rares
 - hétérogénéité anatomique
 - retentissement très variable
 - aide de l'imagerie en coupe



- Anomalies sur le trajet
 - ponts musculaires
 - prévalence élevée
 - généralement bénignes



Groupe de travail multidisciplinaire sur les anomalies coronaires congénitales

Staff ANOCOR

Contact pcaubry@yahoo.fr

Pierre Aubry (Paris)

Olivier Boudvillain (Paris)

Patrick Dupouy (Melun)

Reza Farnoud (Paris)

Xavier Halna du Fretay (Saran)

Athanasios Koutsoukis (Le Plessis Robinson)

Jean-Pierre Laissy (Gonesse)

Phalla Ou (Paris)

Fouad Saadi (Paris)

