



Anomalies de connexion des artères coronaires chez l'adulte  
(ANOCOR)

## **Cathétérisme difficile de la coronaire droite : pensez ANOCOR**

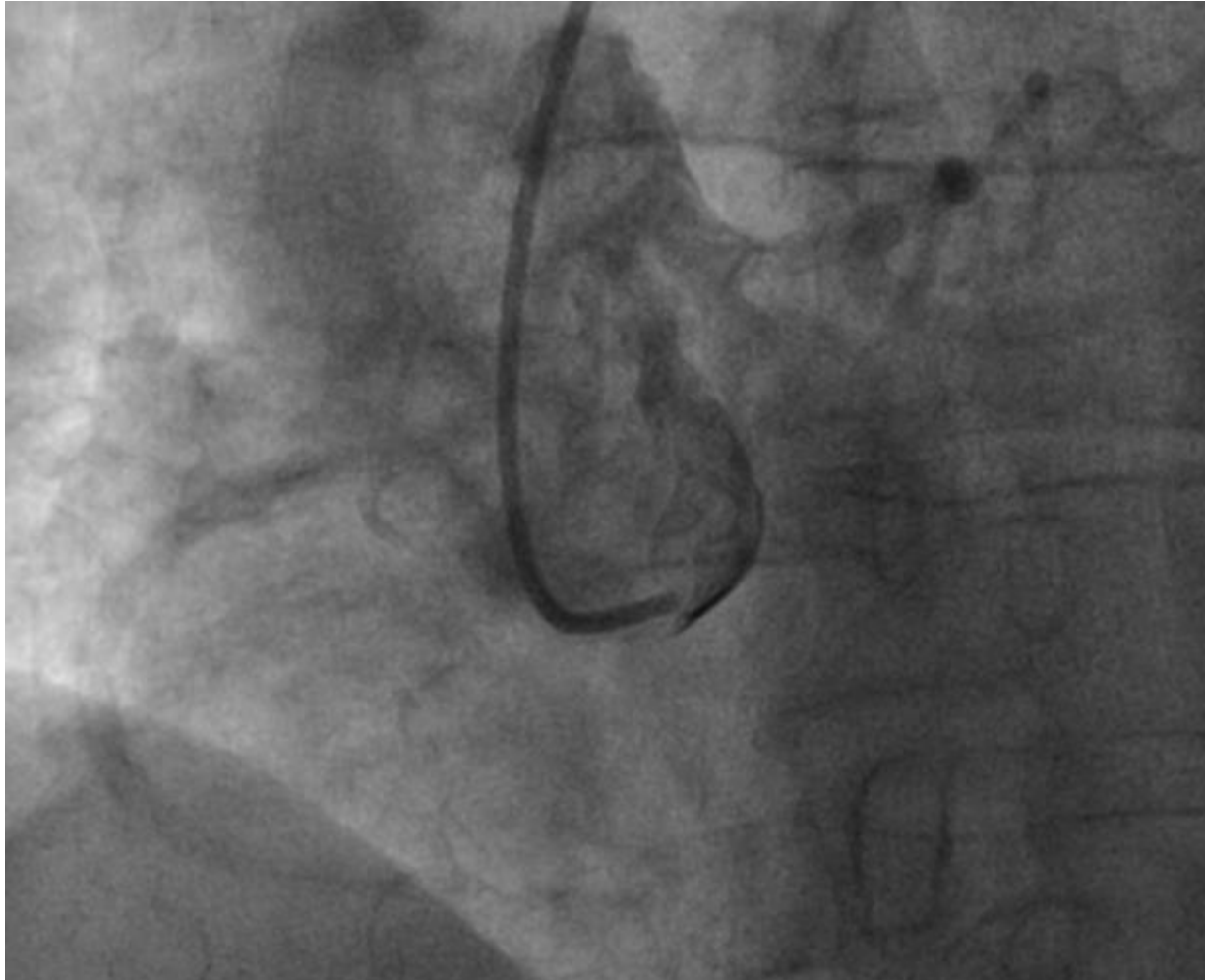
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Centre Hospitalier Universitaire BICHAT  
Paris

10 juin 2015

lien d'intérêt à déclarer

Anomalies de connexion des artères coronaires (ANOCOR)

## **Cathétérisme difficile de la coronaire droite**



# Anomalies de connexion des artères coronaires (ANOCOR)

## COHORTE ANOCOR (n = 472 patients)

- 70 cardiologues interventionnels
- recrutement : 01/2010 - 01/2013
- stratégie thérapeutique vis-à-vis de l'ANOCOR
- suivi clinique prévu à 5 ans

coordination



financement

GACI

Groupe Athérome et Cardiologie Interventionnelle  
de la Société Française de Cardiologie





## Angiographic data

### Types of coronary artery

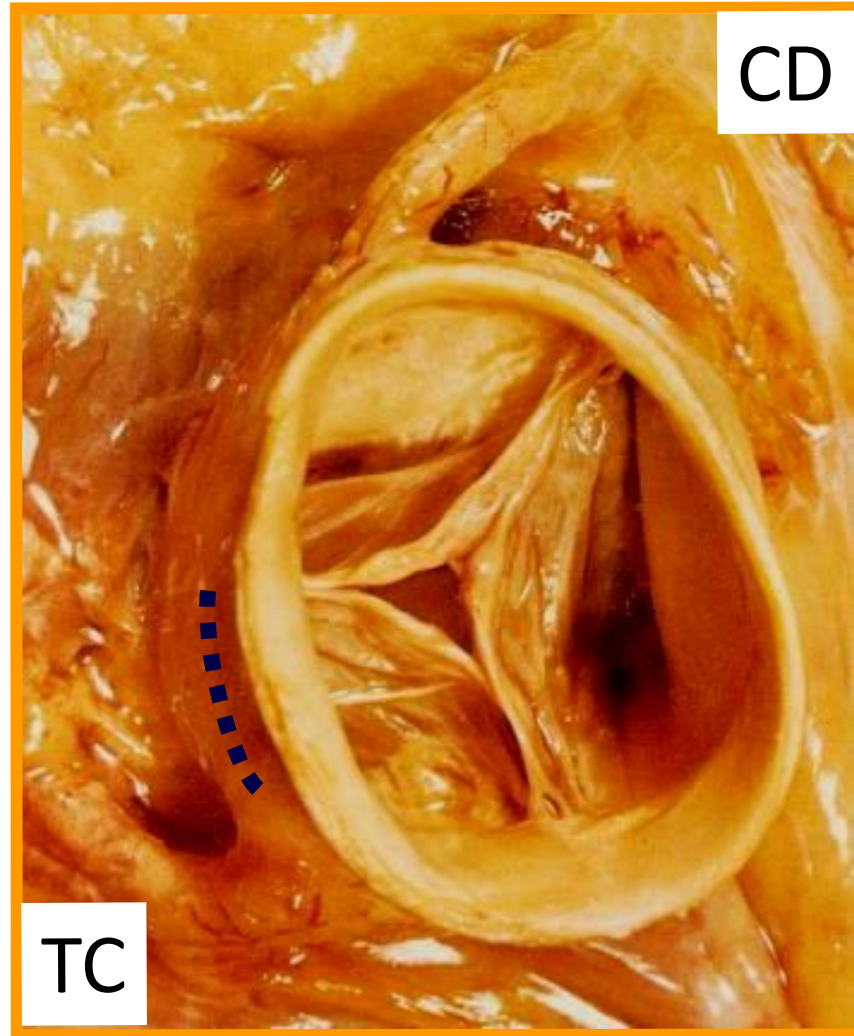
(n = 496)

Left main coronary artery, n (%)	60 (12.1)
LAD coronary artery, n (%)	27 (5.4)
Circumflex coronary artery, n (%)	236 (47.5)
<b>Right coronary artery, n (%)</b>	<b>165 (33.2)</b>
Other arteries, n (%)	9 (1.8)

LAD: left anterior descending

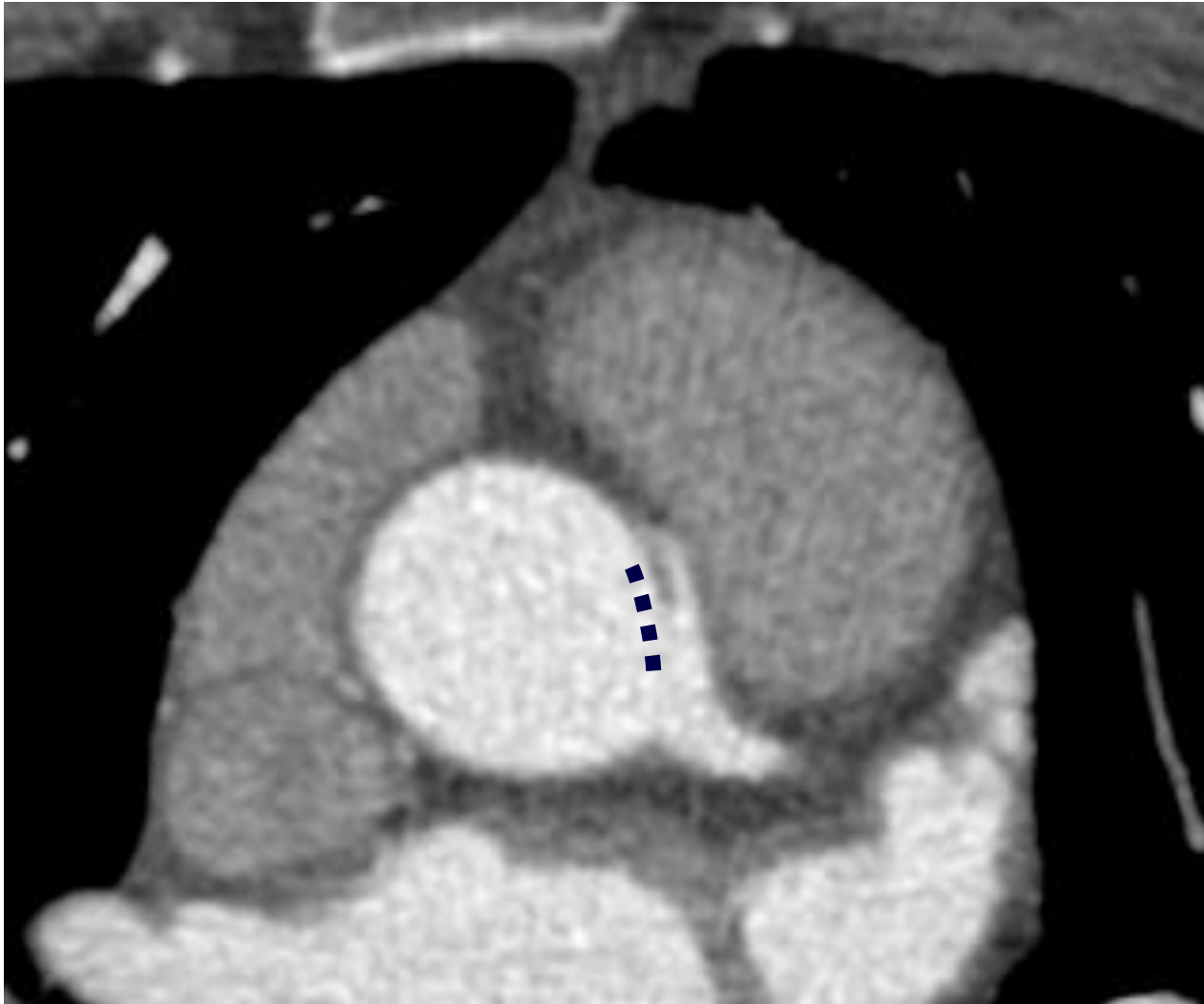
# Anomalies de connexion des artères coronaires (ANOCOR)

## Zone de connexion habituelle (ANOCOR droite)

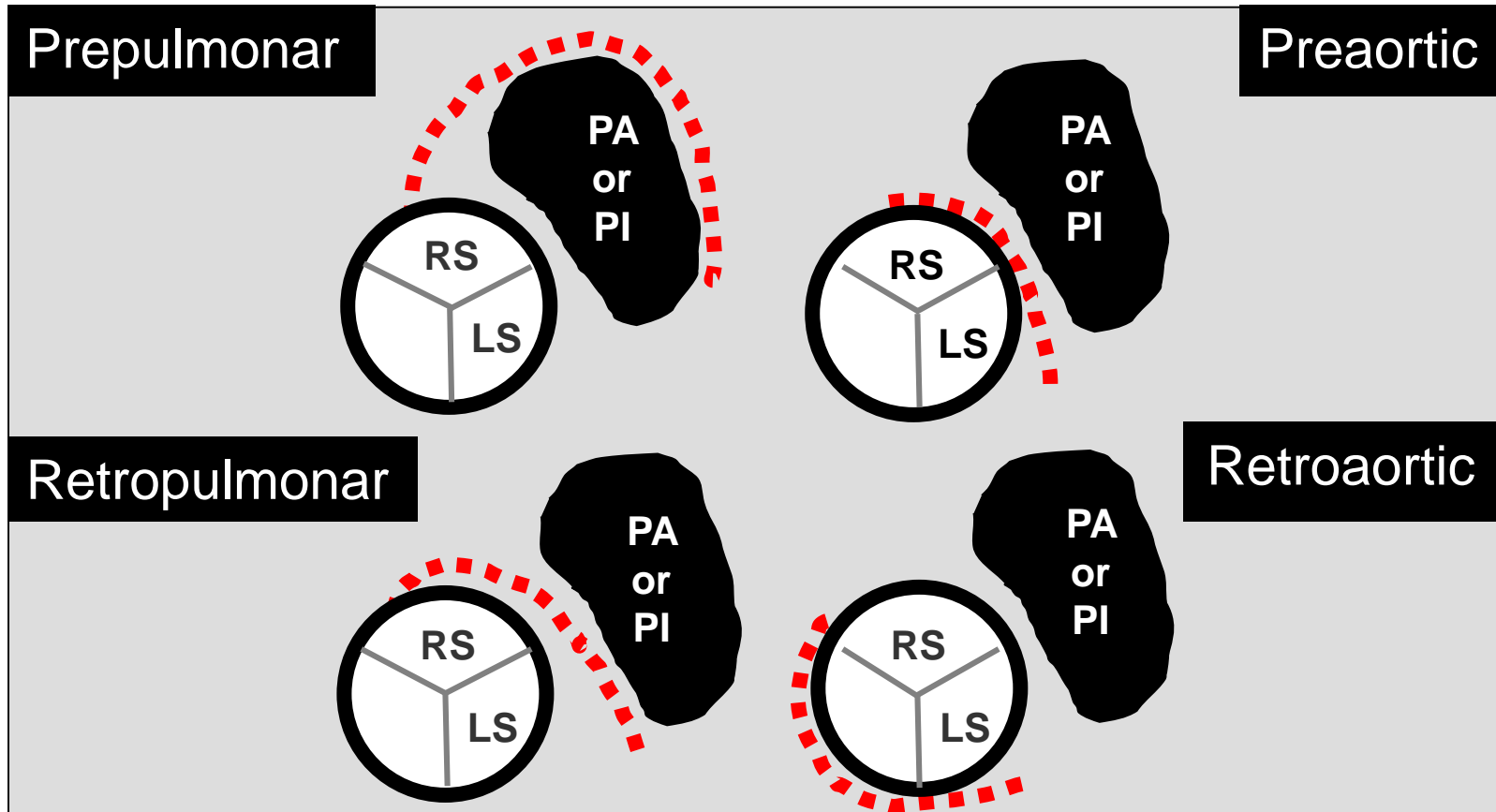


Anomalies de connexion des artères coronaires (ANOCOR)

**Zone de connexion habituelle (ANOCOR droite)**



# Types of course



PA: pulmonary artery, PI : pulmonary infundibulum  
 LS: left sinus, RS: right sinus





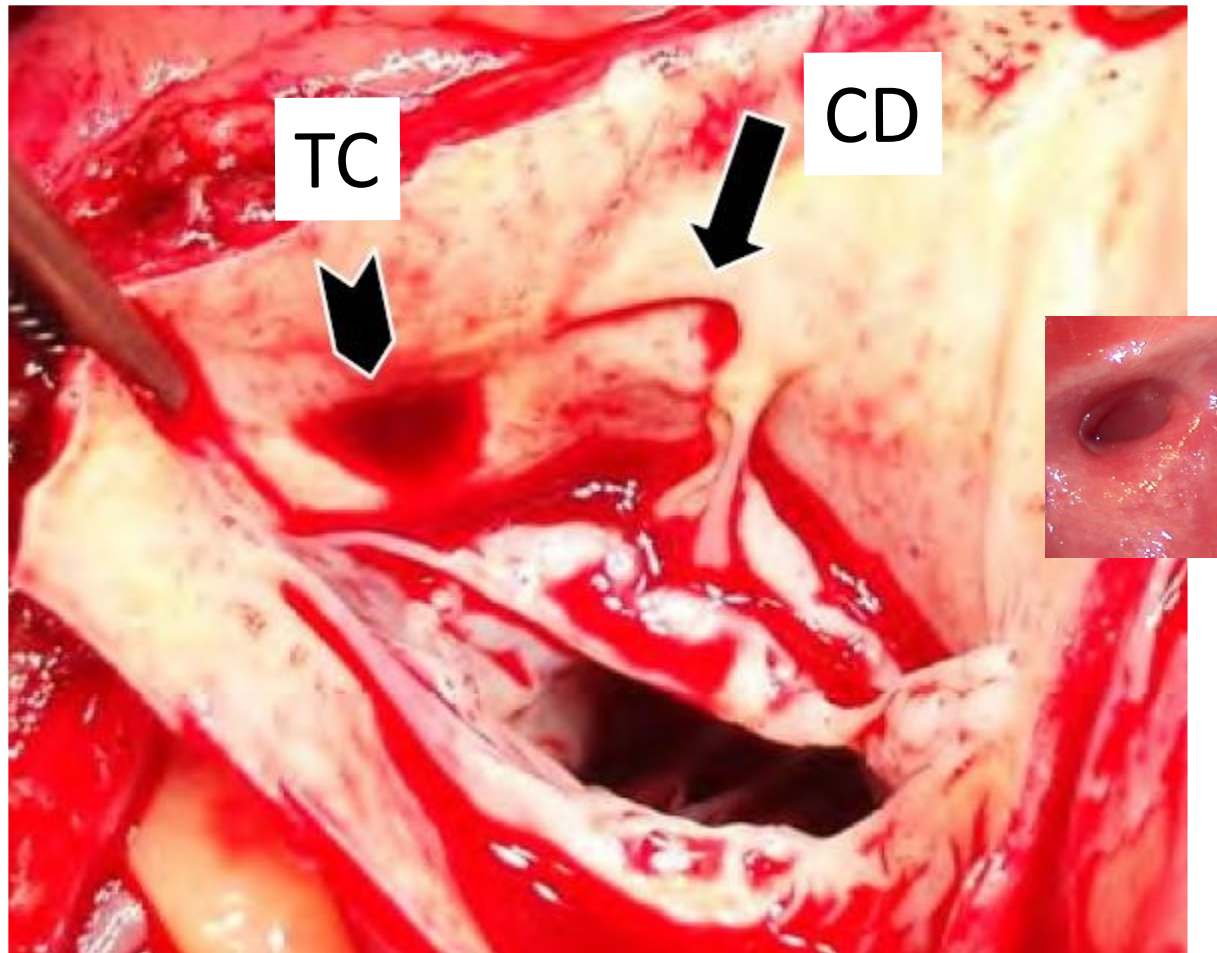
## Angiographic data Preaortic course (n = 155/496)

Left main or LAD coronary artery, n (%)	5 (5.7)
Circumflex coronary artery, n (%)	0
Right coronary artery, n (%)	148 (89.7)

LAD: left anterior descending

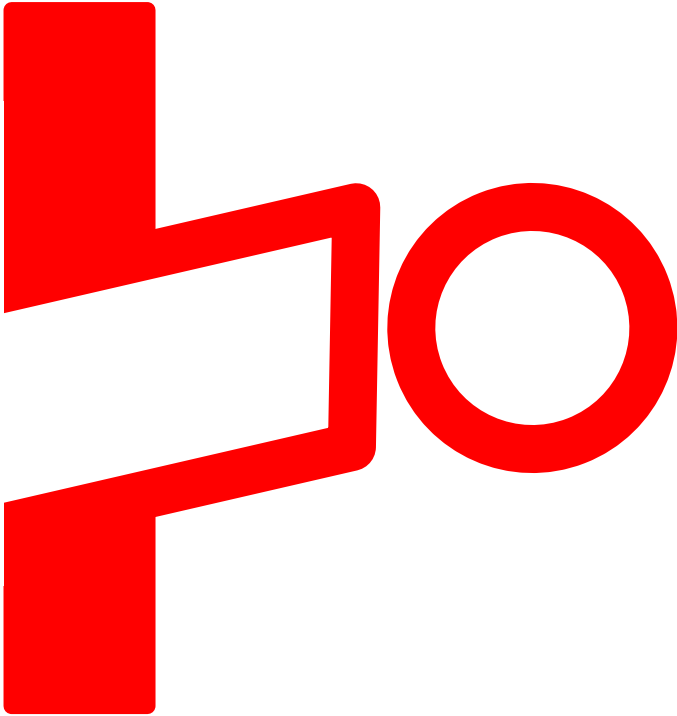
# Anomalies de connexion des artères coronaires (ANOCOR)

## Difficultés de cathéterisme anomalies avec connexion intramurale

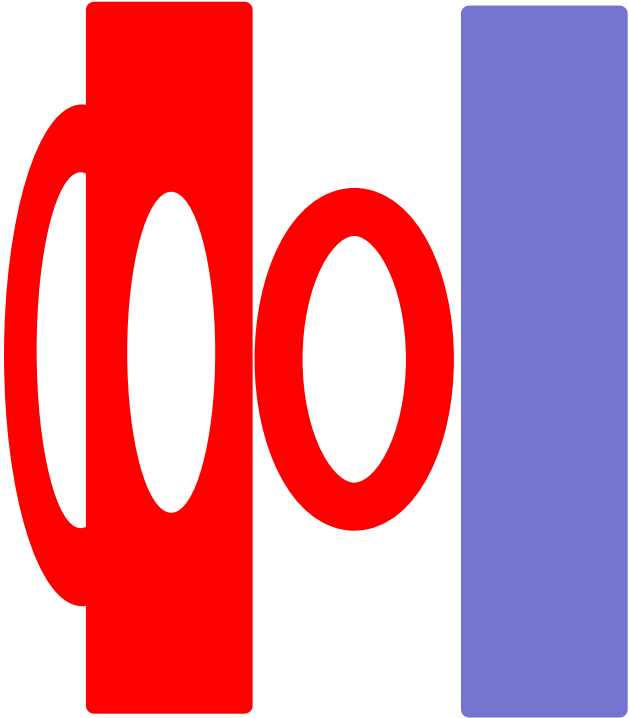


# Anomalies de connexion des artères coronaires (ANOCOR)

connexion  
extramurale

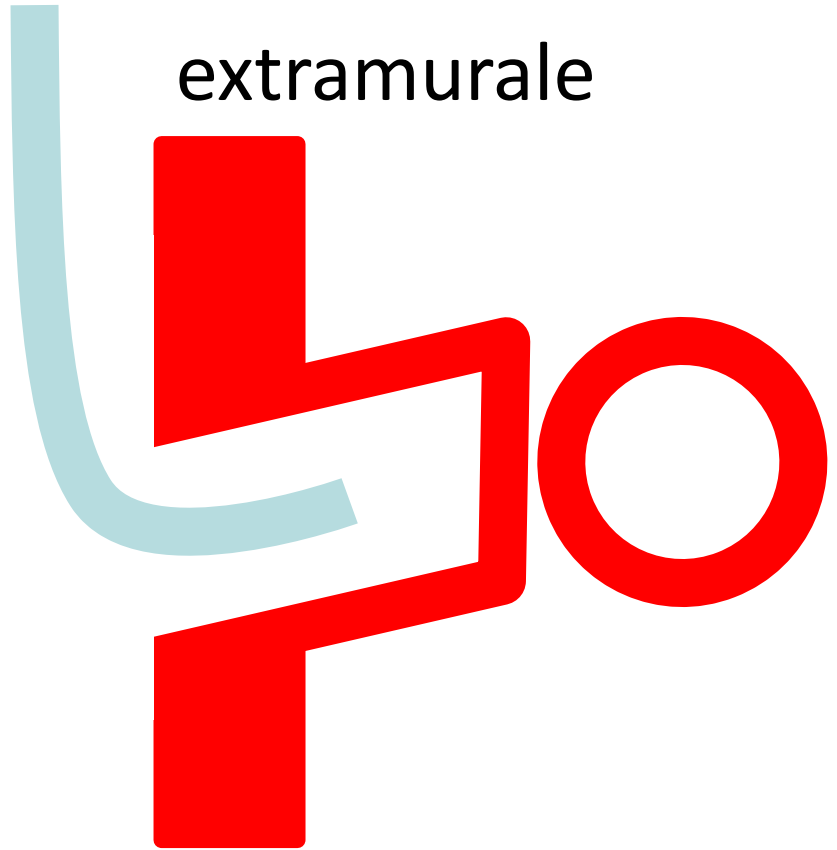


connexion  
intramurale



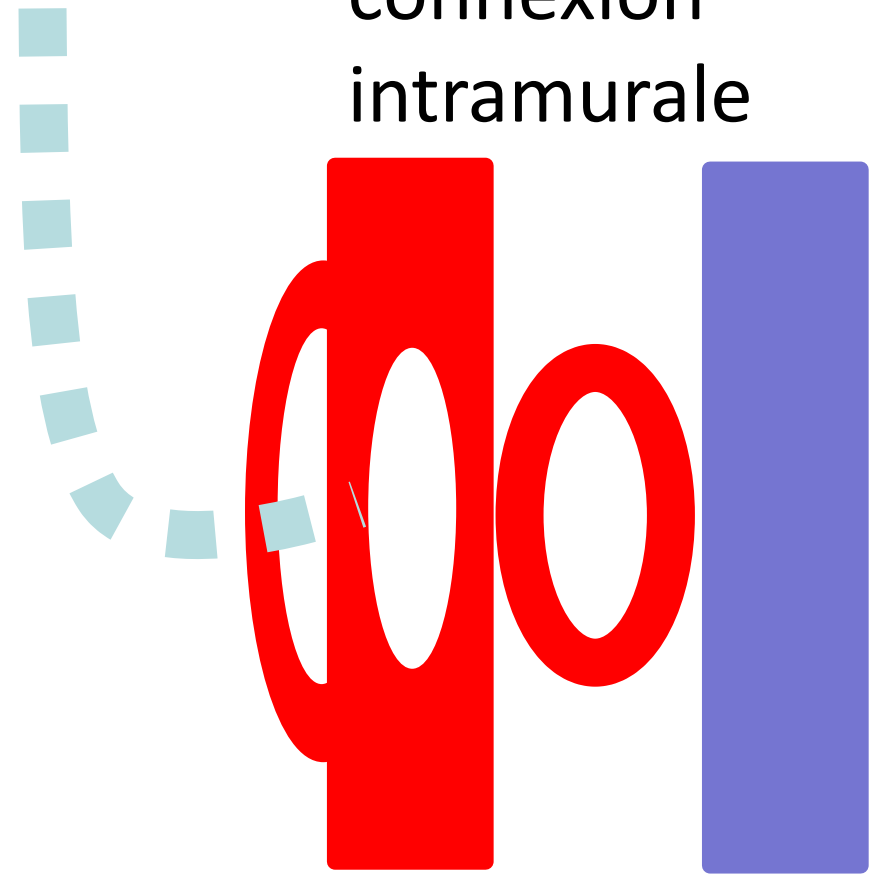
# Anomalies de connexion des artères coronaires (ANOCOR)

connexion  
extramurale



cannulation possible

connexion  
intramurale



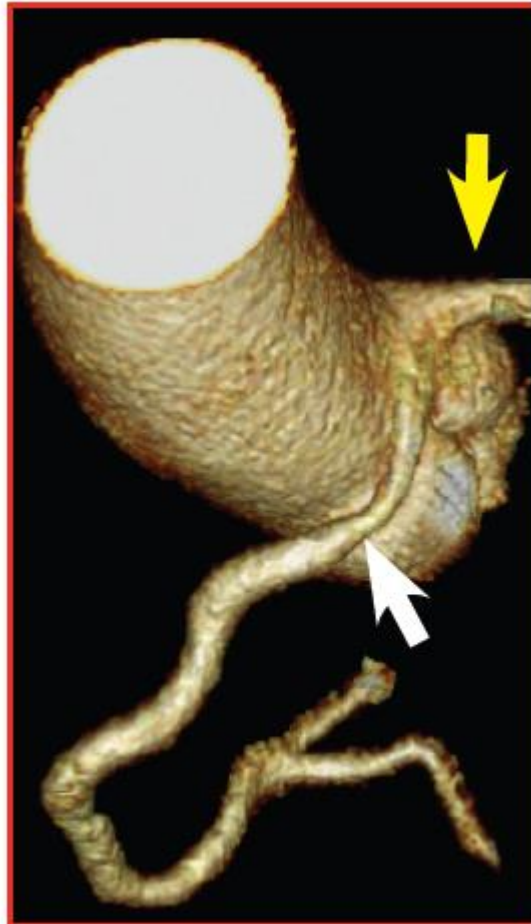
cannulation difficile

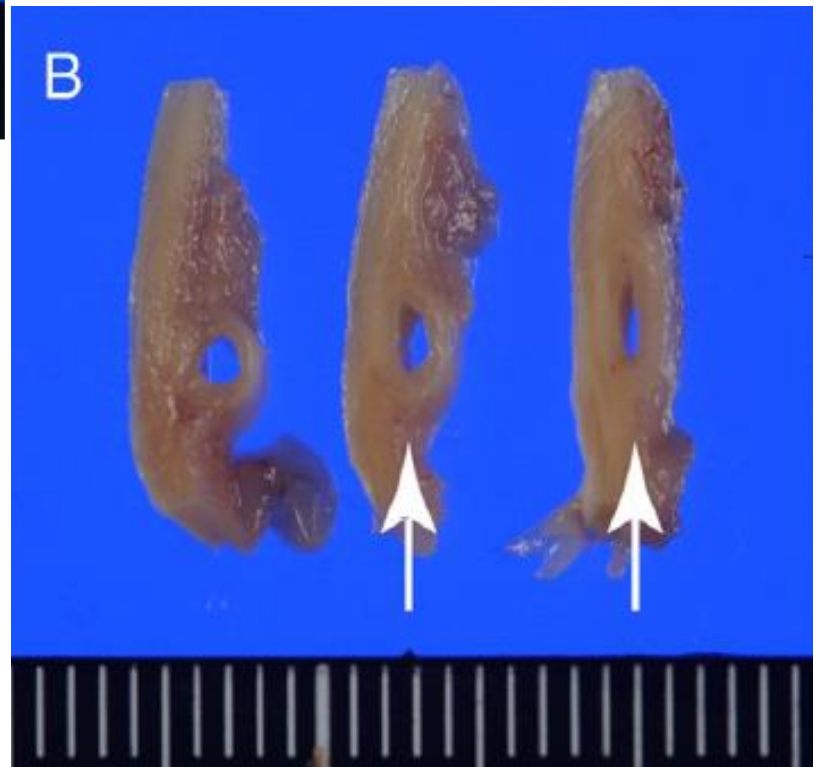
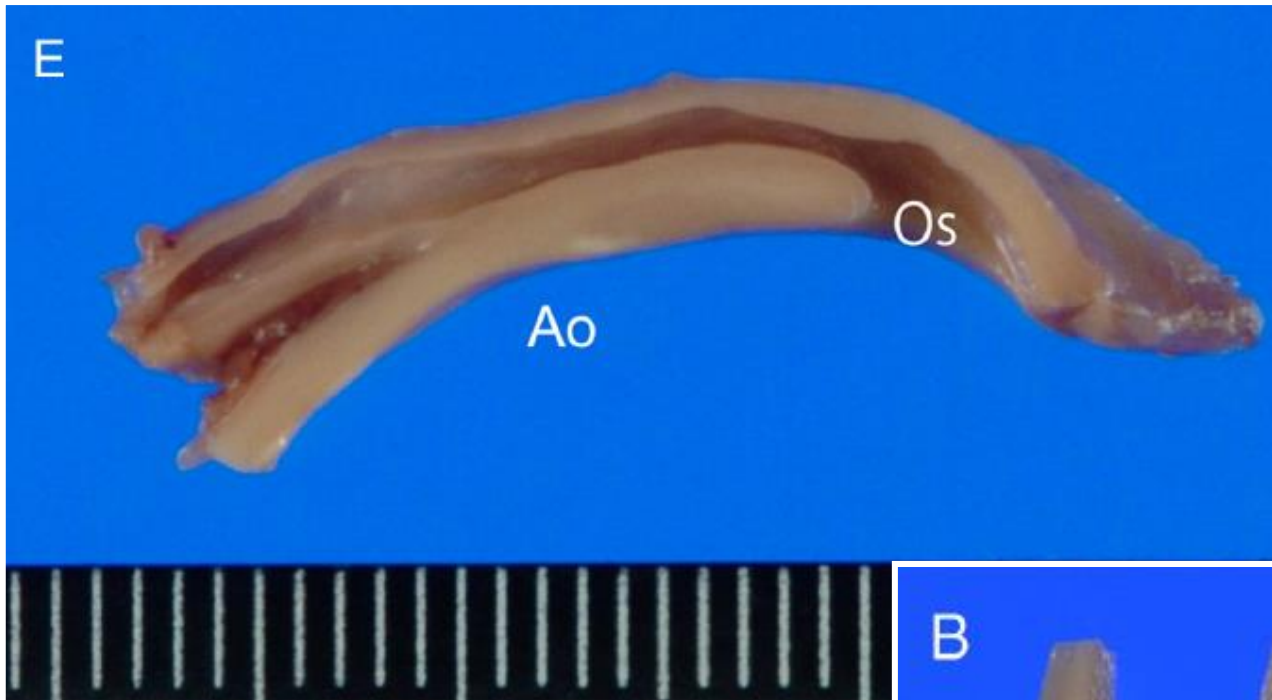
# Anomalies de connexion des artères coronaires (ANOCOR)

Compression artérielle  
**Adaptation artérielle**

Anomalies de connexion des artères coronaires (ANOCOR)

## **ANOCOR droite avec trajet pré aortique**

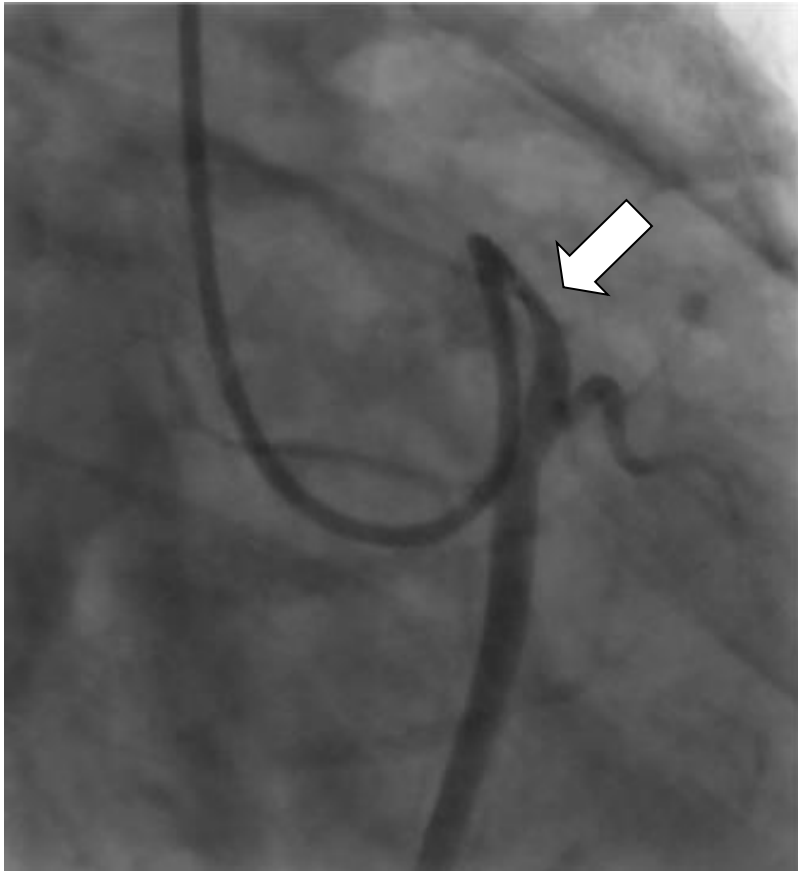




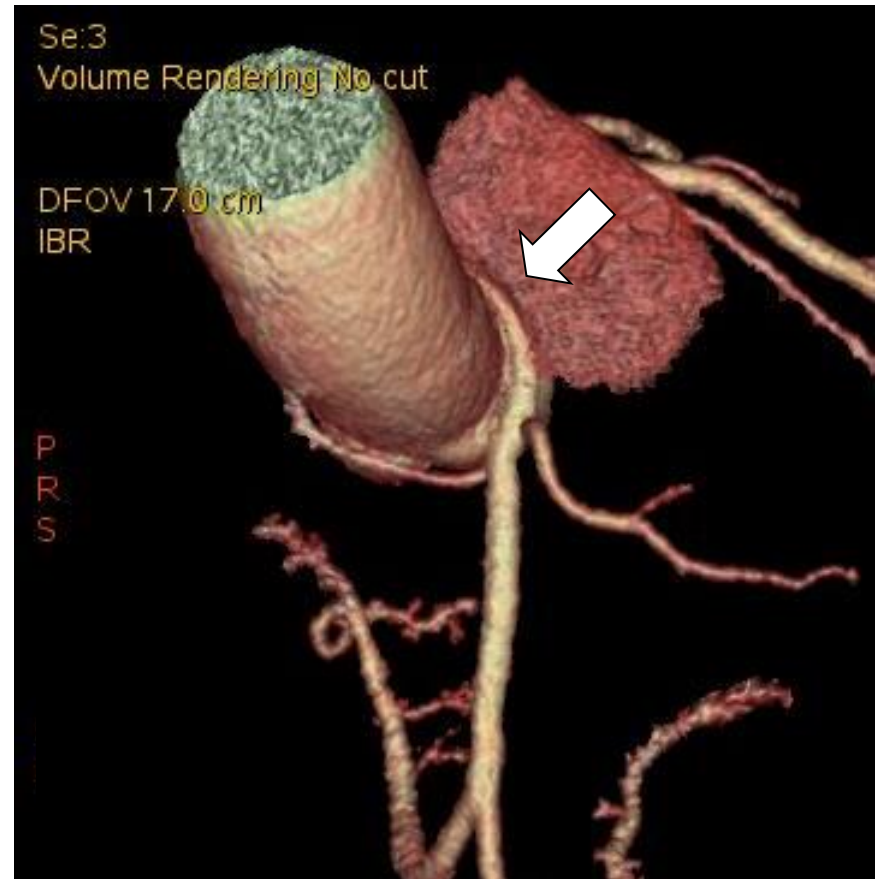
Right ANOCOR with an intramural course  
Hata Y et al.  
Cardiovasc Pathol 2014

# Anomalies de connexion des artères coronaires (ANOCOR)

Coronarographie  
OAD  $\geq 30^\circ$



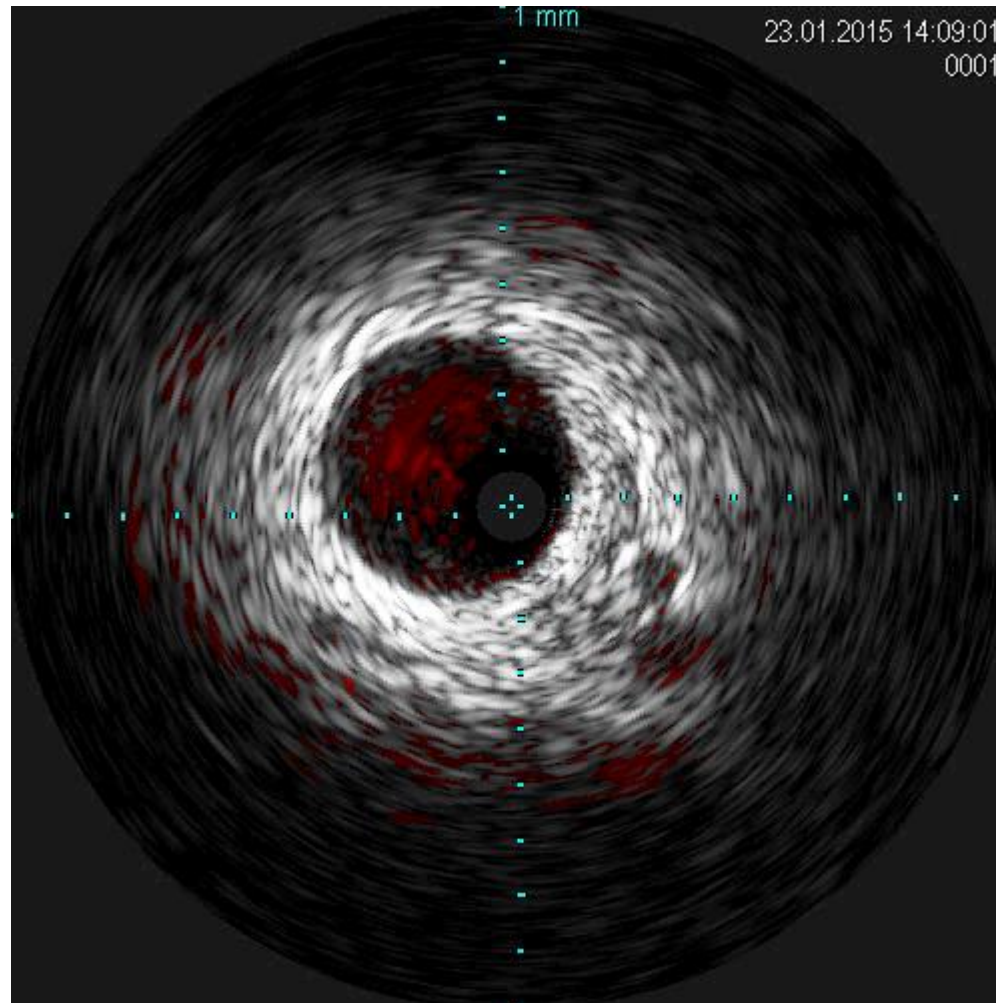
Scanner coronaire  
volumique





# Anomalies de connexion des artères coronaires (ANOCOR)

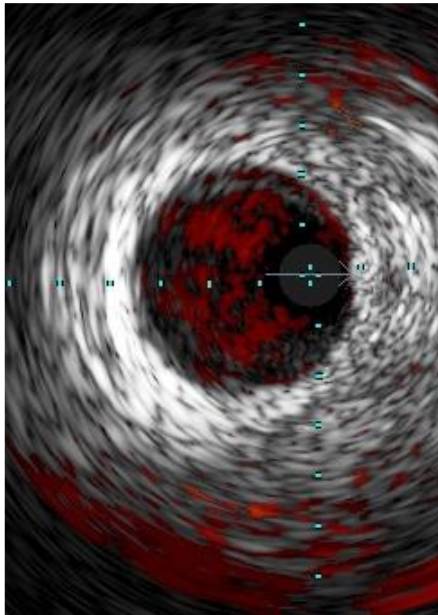
## Echographie endocoronaire



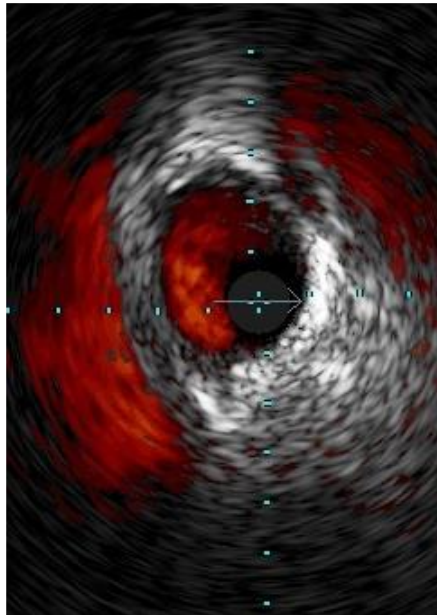
# Anomalies de connexion des artères coronaires (ANOCOR)

## Echographie endocoronaire

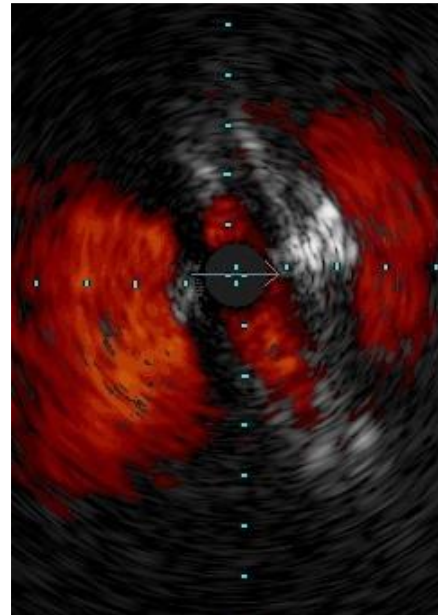
extramural



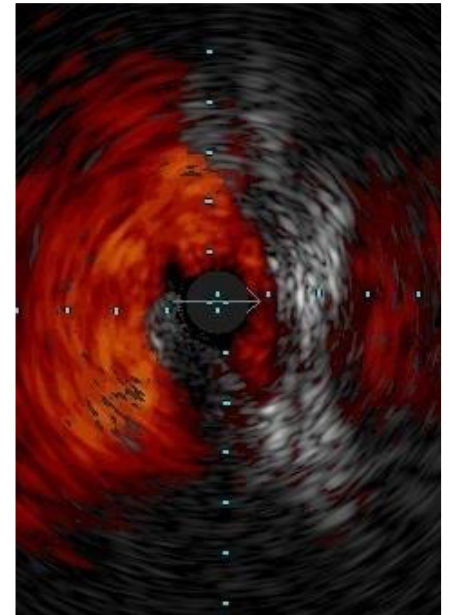
juxtamural



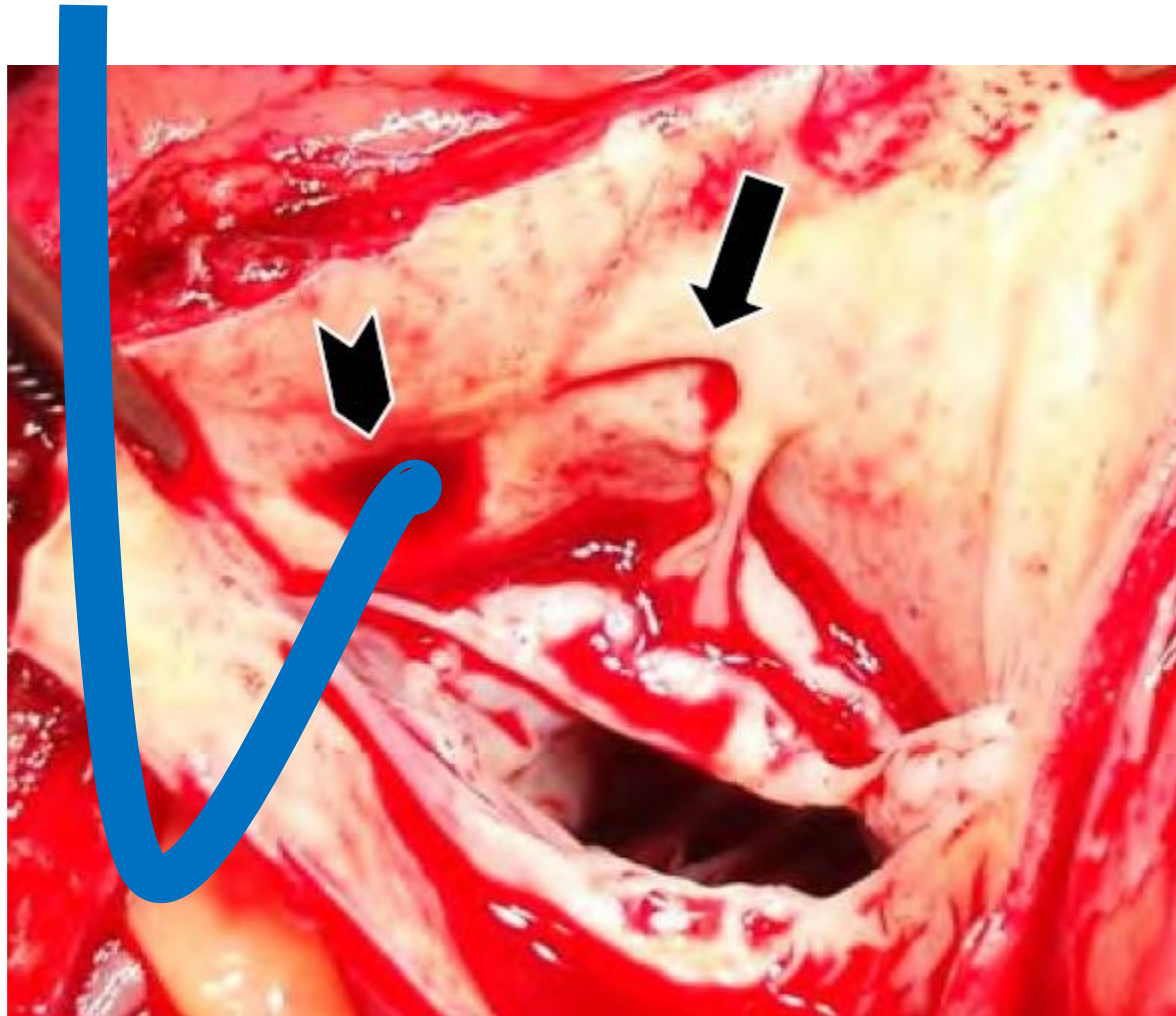
intramural



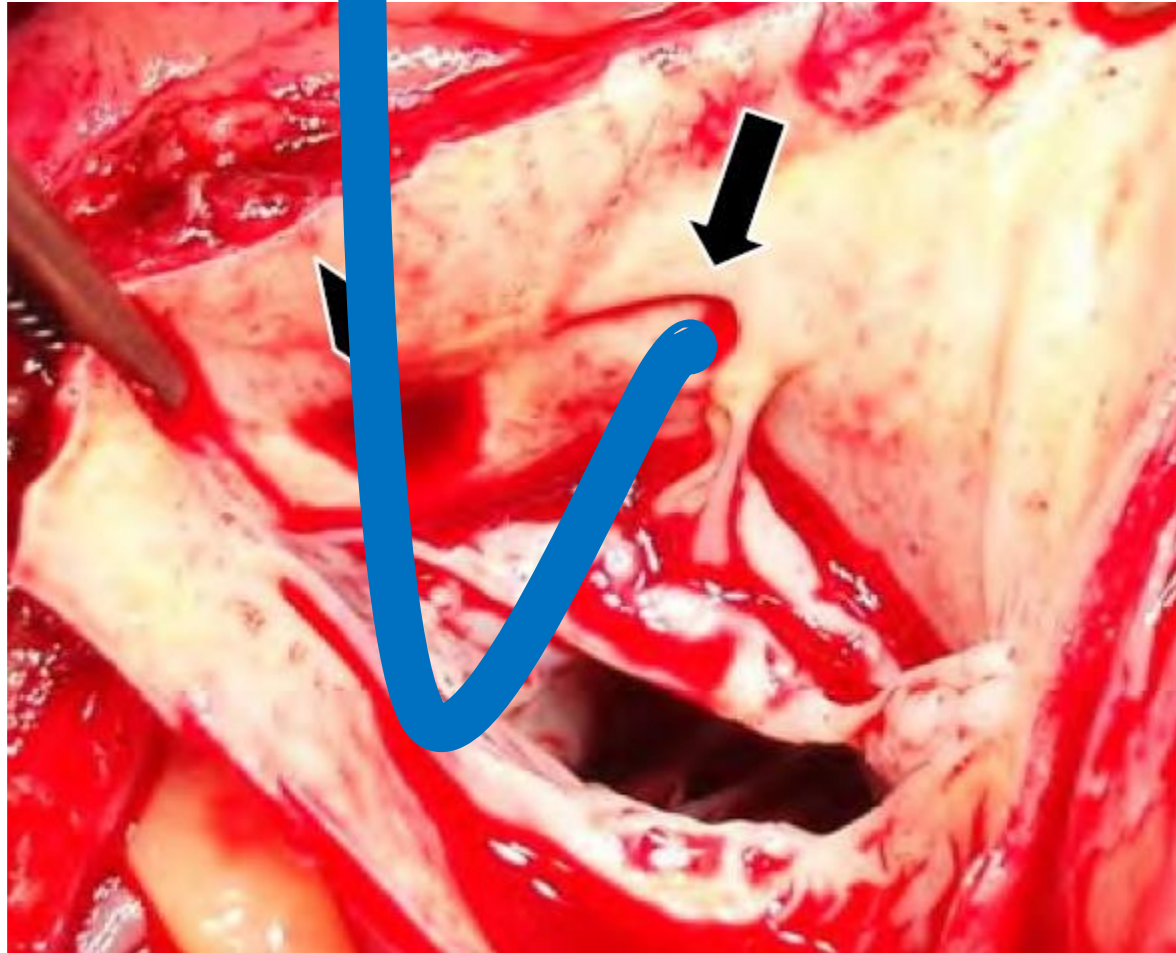
ostium



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## **Anomalous connections of the coronary arteries**

Catherization of anomalous connection of  
a right coronary artery connected with the left coronary sinus

### **My technique**

(in case of failure of adequate opacification with usual technique)

1. Left anterior oblique 30° projection
2. Use of 6F guiding catheters
3. Use of Amplatz Left or Extra Back-Up catheters
4. Cannulation of the left ostium
5. Push the catheter gently to extubate from the ostium
6. Torque the catheter slowly and clockwise
7. Tip of the catheter may arrive facing the ectopic ostium
8. Opacification of the ectopic coronary artery
9. Rapid insertion of a 0.014 wire (better opacification, IVUS, PCI)



**Merci**