Cas clinique : accident coronaire sur coronaropathie congénitale

Syncope au cours d'une activité sportive

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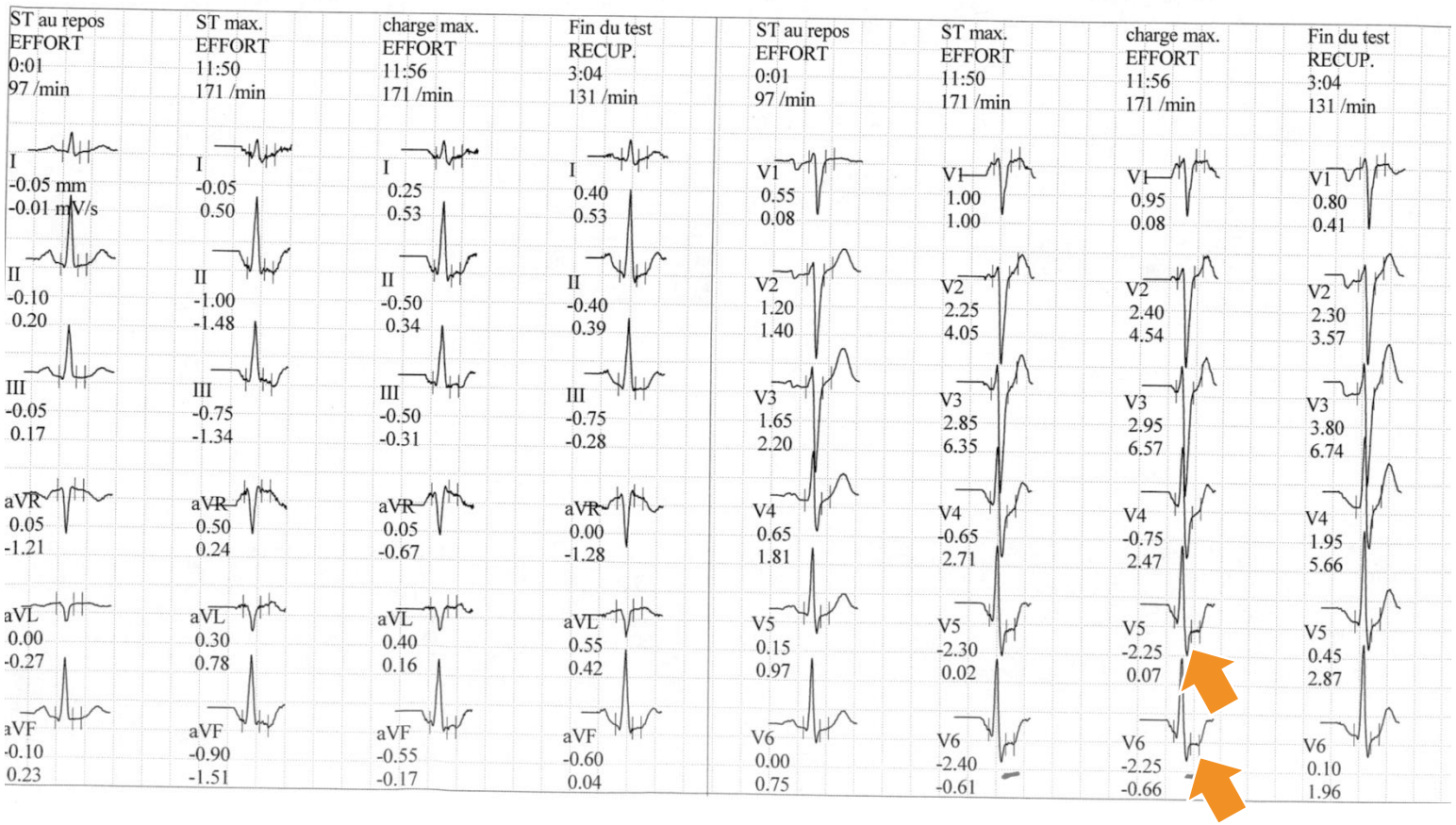
L’auteur ne déclare
aucun conflit d’intérêt

Histoire clinique

- Homme de 64 ans. HTA.
- Pas d'antécédents cliniques cardiaques notables jusqu'en 2019.
- Pratique sportive régulière (vélo avec sorties > 100 km).
- Test d'effort systématique (2017) : asymptomatique et litigieux électriquement. Scintigraphie myocardique : anomalie fixation antérieure considérée non significative.
- Juillet 2019 : malaise lors sortie vélo (80 km) suivi perte de connaissance brève avec chute traumatique. Pas de douleur thoracique. Pas de palpitations.

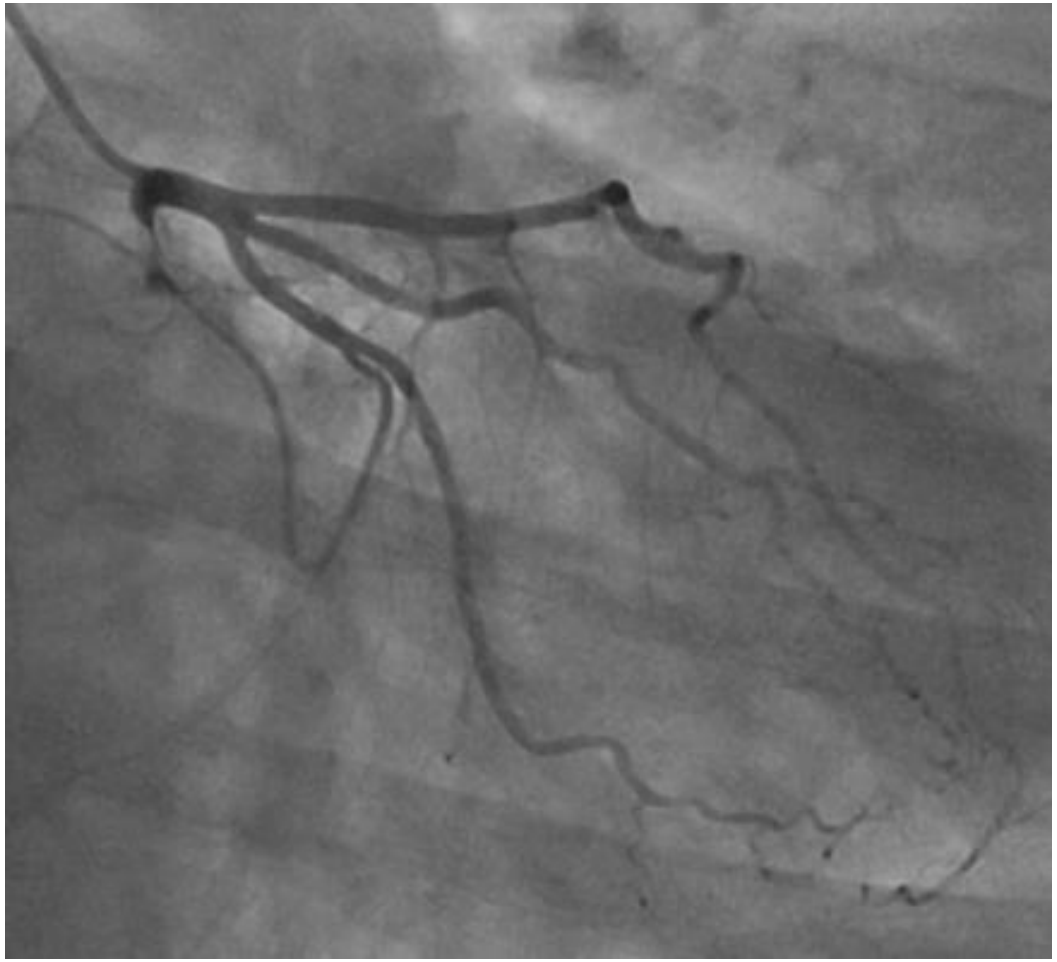
Nouveau bilan

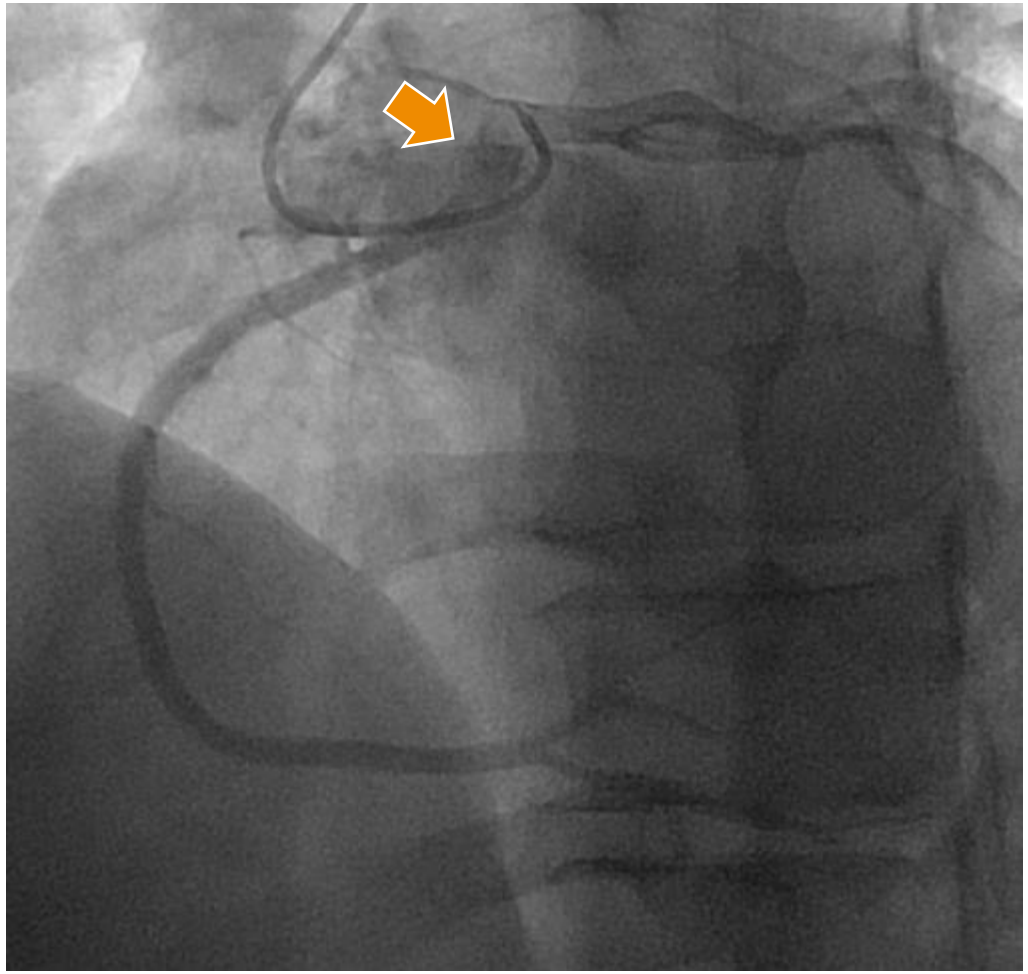
- Examen clinique normal.
- ECG normal.
- Echocardiogramme normal.
- Test d'effort :
  asymptomatique
  sous-décalage ST > 2 mm
  250 W



- Coronarographie proposée.

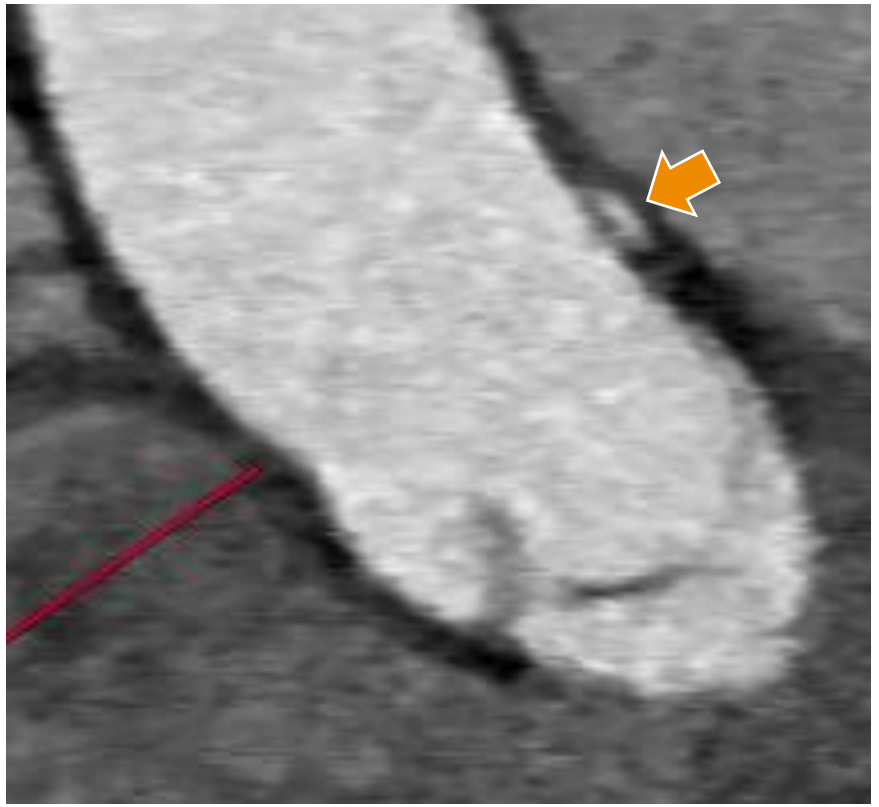
Coronarographie

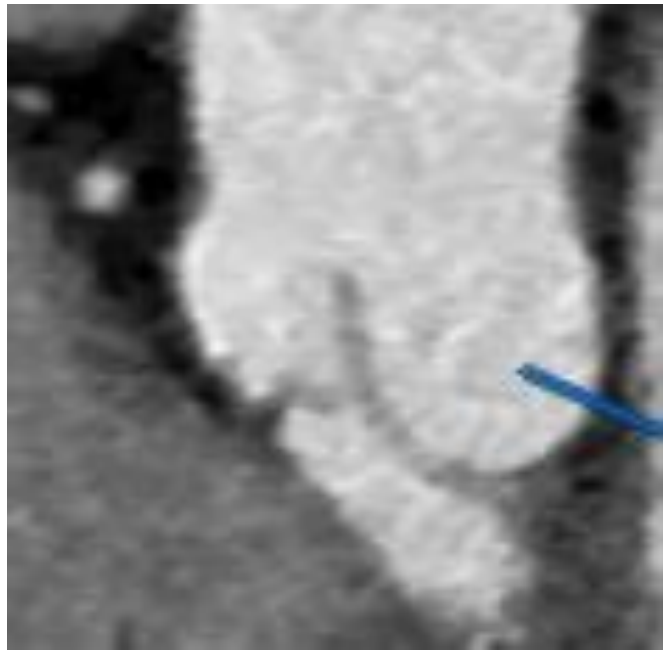




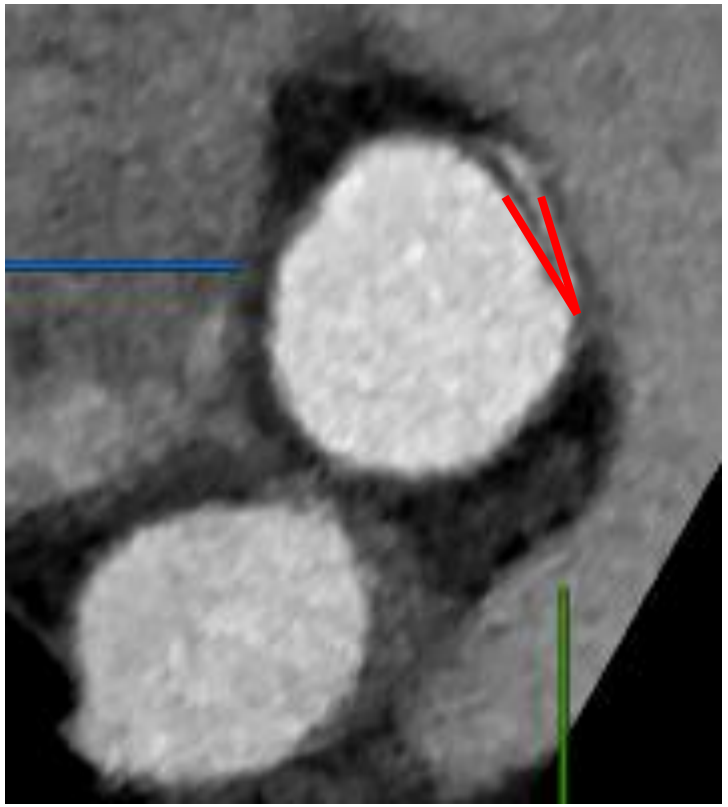
Scanner coronaire

Scanner coronaire

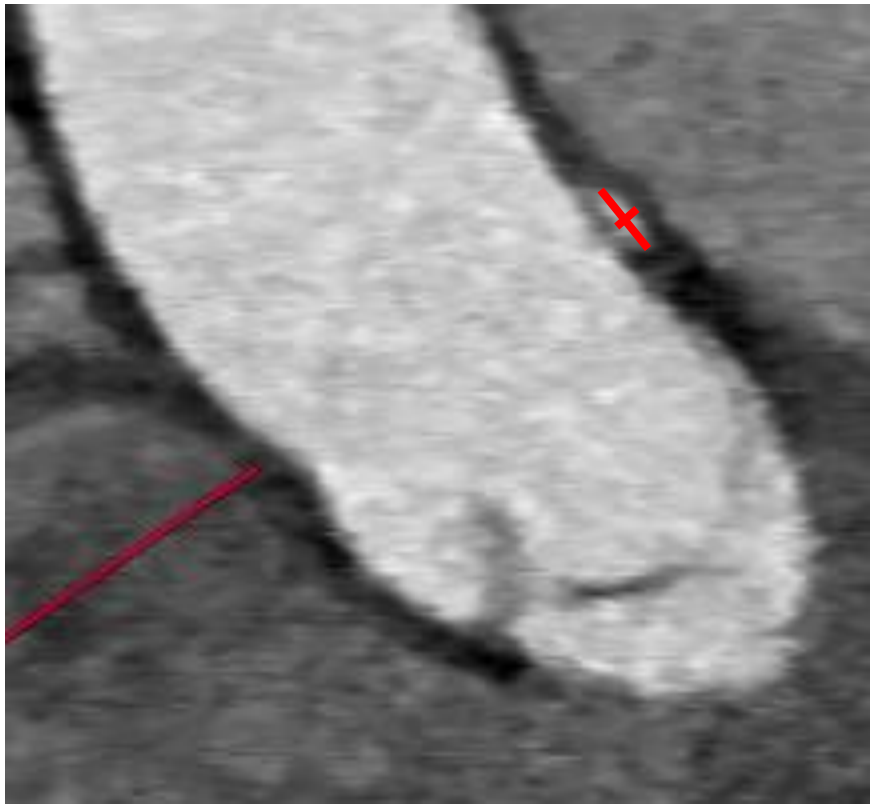




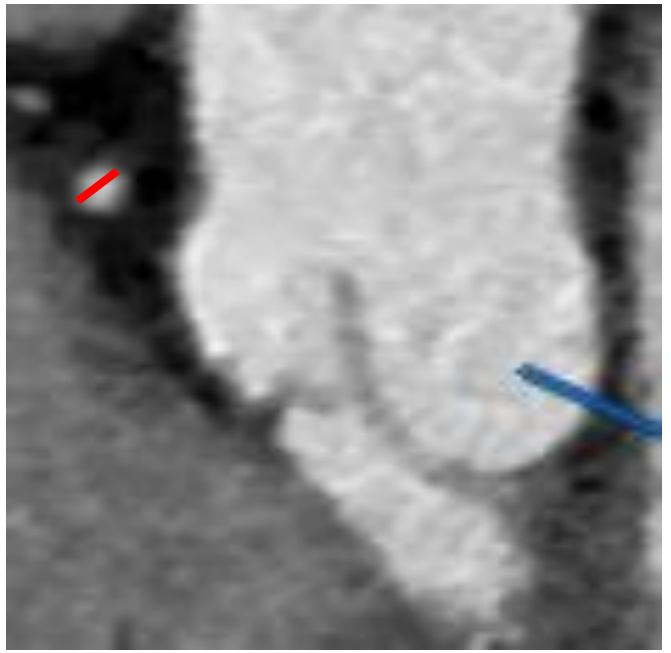
Scanner coronaire



Angle de connexion



Déformation juxta-ostiale



Réduction de diamètre/surface

Discussion multidisciplinaire

Conclusions

- Connexion ectopique coronaire droite dans sinus gauche
- Trajet interartériel avec passage intramural aortique très probable
- Forme anatomique à risque ischémie myocardique et mort subite (généralement avant 35 ans et avec incidence individuelle annuelle faible)
- Critères anatomiques de sévérité : tous présents
- Découverte au cours bilan syncope d'effort (vélo)
- Ischémie myocardique documentée par test d'effort
- Lien entre symptomatologie et anomalie coronaire : certain
- Lien entre ischémie myocardique et anomalie coronaire : certain

Recommandations

ESC
European Society of Cardiology

European Heart Journal (2020) **00**, 1–83
doi:10.1093/eurheartj/ehaa554

ESC GUIDELINES

2020 ESC Guidelines for the management of adult congenital heart disease

The Task Force for the management of adult congenital heart disease of the European Society of Cardiology (ESC)

Authors/Task Force Members: Helmut Baumgartner* (Chairperson) (Germany), Julie De Backer* (Chairperson) (Belgium), Sonya V. Babu-Narayan (United Kingdom), Werner Budts (Belgium), Massimo Chessa [1] (Italy), Gerhard-Paul Diller (Germany), Bernard Iung (France), Jolanda Kluin (Netherlands), Irene M. Lang (Austria), Folkert Meijboom (Netherlands), Philip Moons (Belgium), Barbara J. M. Mulder (Netherlands), Erwin Oechslin (Canada), Jolien W. Roos-Hesselink (Netherlands), Markus Schwerzmann (Switzerland), Lars Sondergaard (Denmark), Katja Zeppenfeld (Netherlands)

Recommandations

2020 ESC Guidelines for the management of 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

Gaps in evidence

6.2.10 Coronary anomalies

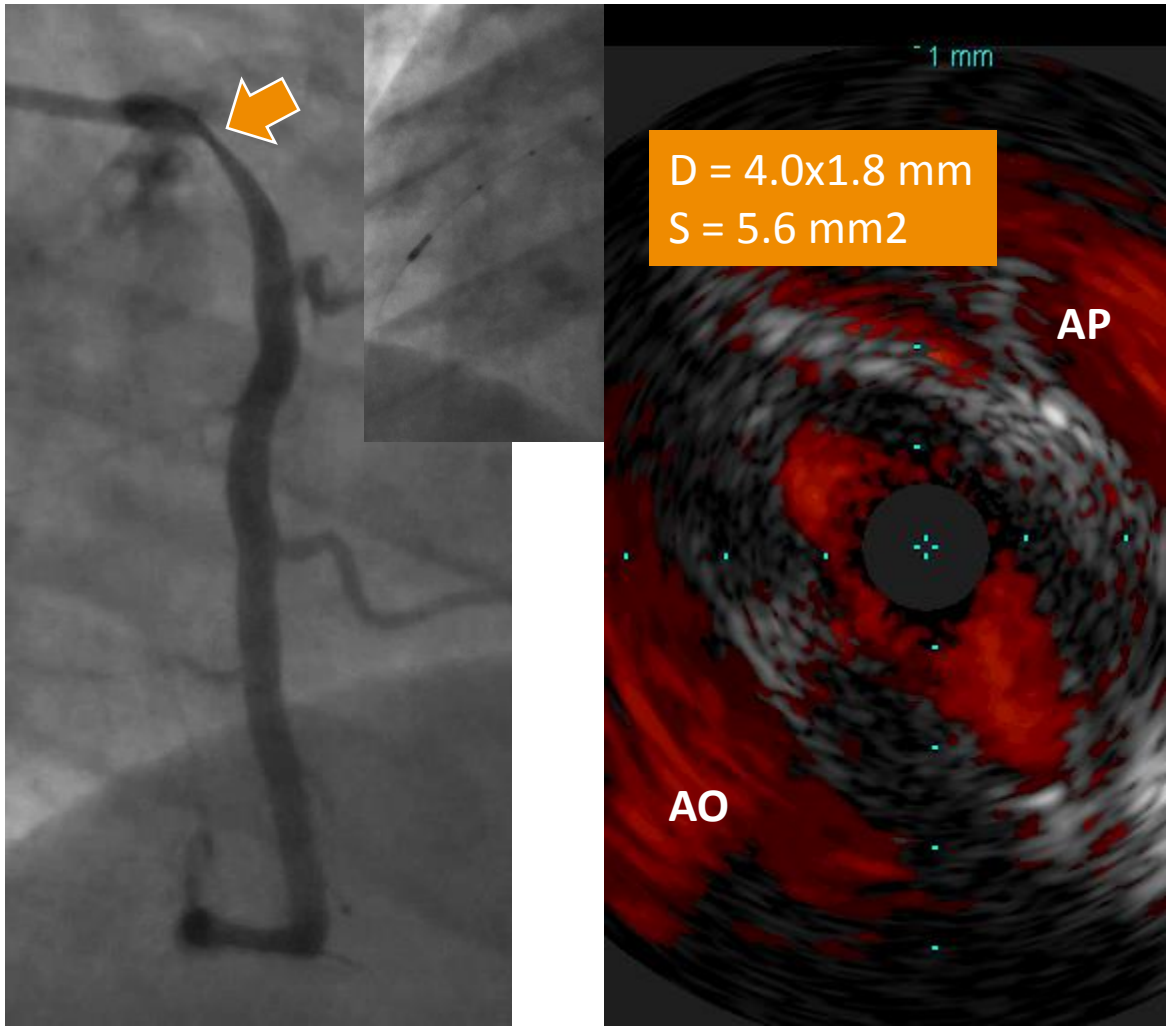
- Identification of adult patients with coronary anomalies (AAOCA, ACAPA) who are at risk for SCD, and for whom surgery provides benefit at adult age, requires further research.

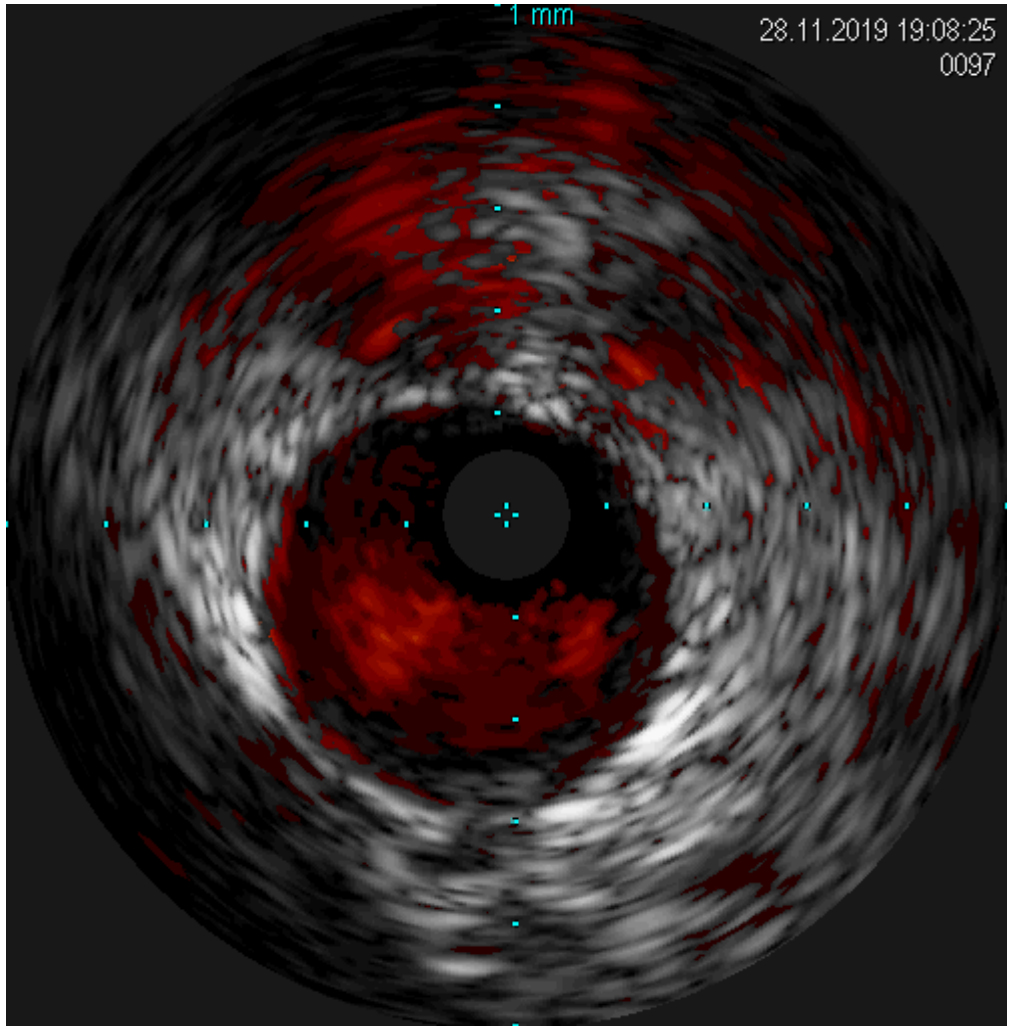
Discussion multidisciplinaire

Propositions

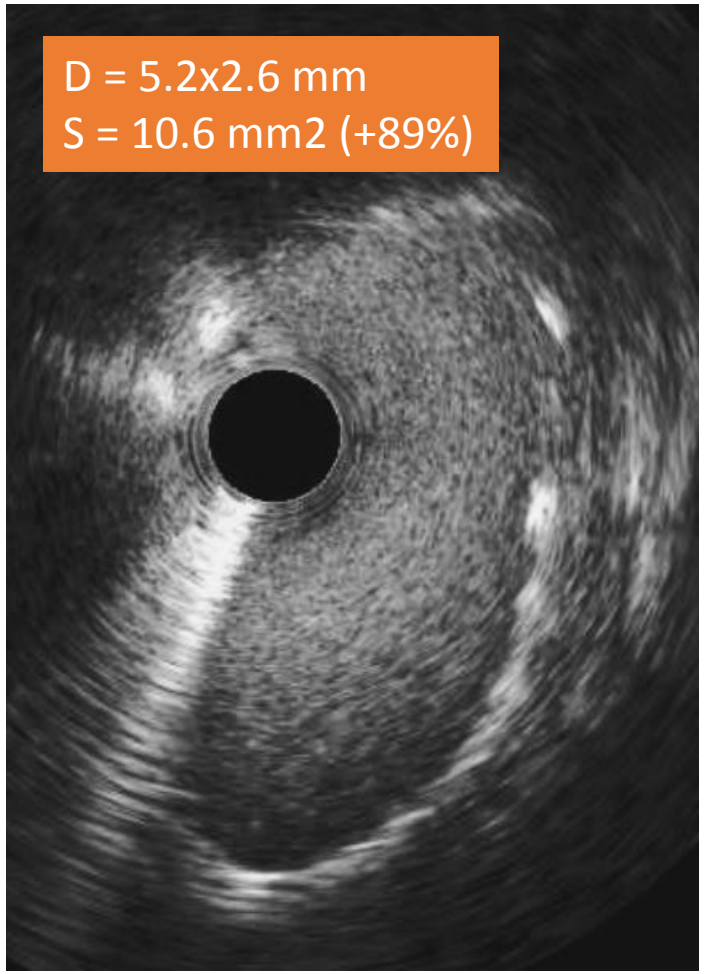
- IRM cardiaque (recherche zones de fibrose/nécrose) : normale
- Correction de l'anomalie coronaire symptomatique avec ischémie myocardique documentée
- Correction plutôt par angioplastie coronaire (âge > 35 ans) précédée évaluation échographique endocoronaire

Evaluation angiograhique et échographique





Traitement percutané



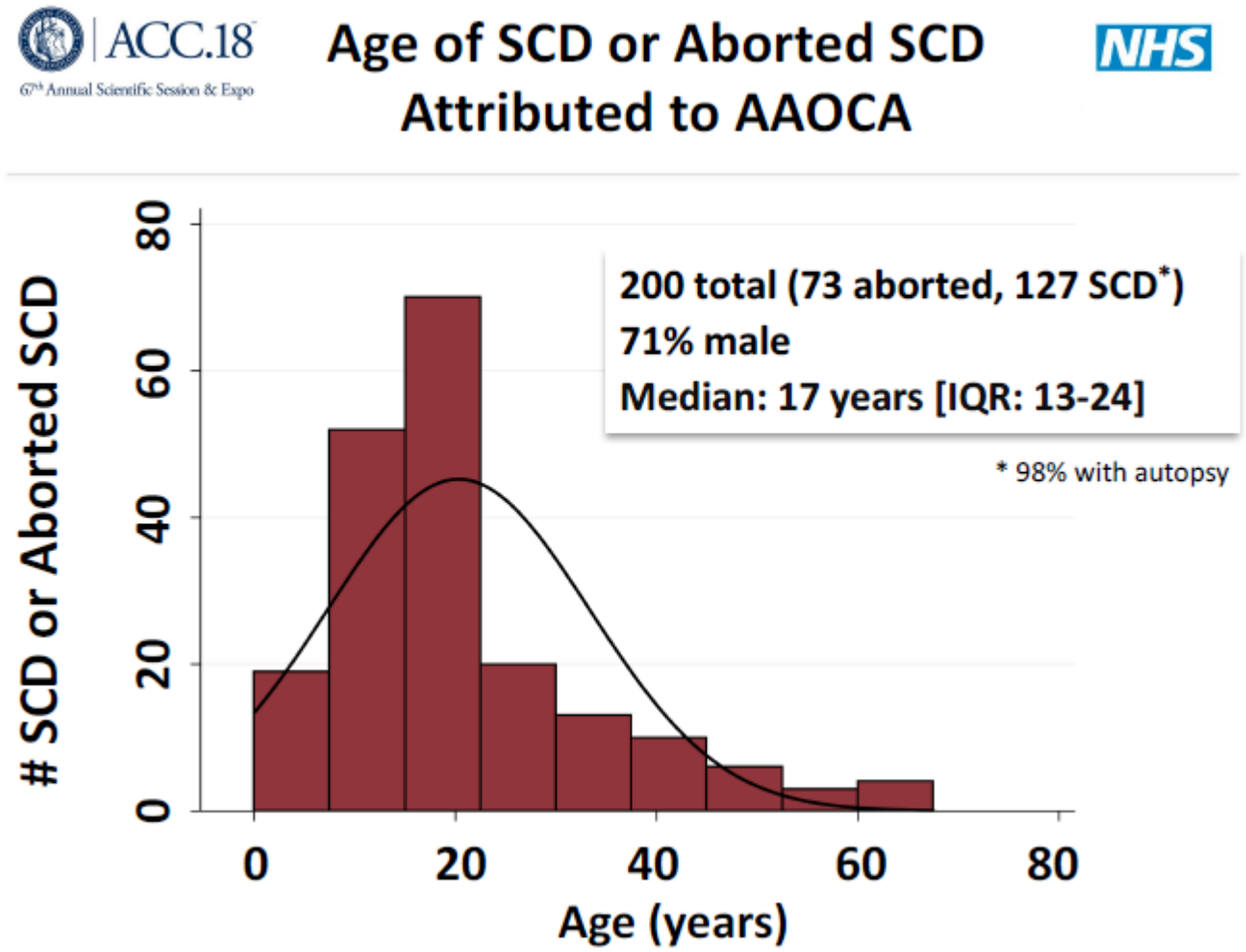
Choix thérapeutique

Rationnel pour une correction percutanée

- Recommandations : ciblées pour une population jeune.
- Décisions thérapeutiques : indiquées sans tenir compte de l'âge.
- Etudes randomisées contrôlées : aucune.
- Histoire naturelle et corrigée : mal connue à long terme.
- Correction chirurgicale : techniques très spécialisées.
- Echecs chirurgicaux : anévrysme, sténose cicatricielle, thrombose précoce.
- Faisabilité de l'angioplastie : démontrée dans plusieurs séries.

Choix thérapeutique

Age, mort subite et anomalies coronaires



Shiwani H et al. ACC 2018

Mécanismes de la syncope

- Lipothymie ou syncope d’effort : aussi fréquentes qu’angor d’effort.
- Ischémie myocardique très probable.
- Trouble du rythme ventriculaire associé ?
- Encore des inconnues sur la physiopathologie.

Projet après correction

- Test d’effort à 3 mois.
- Test fonctionnel avec imagerie à 6/12 mois.
- Scanner coronaire à 6/12 mois.
- Autorisation reprise activité sportive habituelle.

Recommandations

ESC European Society of Cardiology

European Heart Journal (2020) **00**, 1–80
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ESC GUIDELINES

2020 ESC Guidelines on sports cardiology and exercise in patients with cardiovascular disease

The Task Force on sports cardiology and exercise in patients with cardiovascular disease of the European Society of Cardiology (ESC)

Authors/Task Force Members: Antonio Pelliccia* (Chairperson) (Italy), Sanjay Sharma* (Chairperson) (United Kingdom), Sabiha Gati (United Kingdom), Maria Bäck (Sweden), Mats Börjesson (Sweden), Stefano Caselli (Switzerland), Jean-Philippe Collet (France), Domenico Corrado (Italy), Jonathan A. Drezner (United States of America), Martin Halle (Germany), Dominique Hansen (Belgium), Hein Heidbuchel (Belgium), Jonathan Myers (United States of America), Josef Niebauer (Austria), Michael Papadakis (United Kingdom), Massimo Francesco Piepoli (Italy), Eva Prescott (Denmark), Jolien W. Roos-Hesselink (Netherlands), A. Graham Stuart (United Kingdom), Rod S. Taylor (United Kingdom), Paul D. Thompson (United States of America), Monica Tiberi (Italy), Luc Vanhees (Belgium), Matthias Wilhelm (Switzerland)

Recommandations

2020 ESC Guidelines on sports cardiology and exercise in patients with cardiovascular disease

Recommendations for exercise in young individuals/athletes with anomalous origins of coronary arteries

Recommendations	Class[a]	Level[b]
When considering sports activities, evaluation with imaging tests to identify high-risk patterns and an exercise stress test to check for ischaemia should be considered in individuals with AOCA.	IIa	C
In asymptomatic individuals with an anomalous coronary artery that does not course between the large vessels, does not have a slit-like orifice with reduced lumen and/or intramural course, competition may be considered, after adequate counselling on the risks, provided there is absence of inducible ischaemia.	IIb	C
After surgical repair of an AOCA, participation in all sports may be considered, at the earliest 3 months after surgery, if they are asymptomatic and there is no evidence of inducible myocardial ischaemia or complex cardiac arrhythmias during maximal exercise stress test.	IIb	C
Participation in most competitive sports with a moderate and high cardiovascular demand among individuals with AOCA with an acutely angled take-off or an anomalous course between the large vessels is not recommended.[c]	III	C

AOCA = anomalous origin of coronary arteries.
[a]Class of recommendation.
[b]Level of evidence.
[c]This recommendation applies whether the anomaly is identified as a consequence of symptoms or discovered incidentally, and in individuals <40 years of age.

Recommandations

2020 ESC Guidelines on sports cardiology and exercise in patients with cardiovascular disease

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Recommandations

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AHA/ACC SCIENTIFIC STATEMENT

Eligibility and Disqualification Recommendations for Competitive Athletes With Cardiovascular Abnormalities: Task Force 4: Congenital Heart Disease

A Scientific Statement From the American Heart Association and American College of Cardiology

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Recommandations

AHA/ACC SCIENTIFIC STATEMENT

Eligibility and Disqualification Recommendations for Competitive Athletes With Cardiovascular Abnormalities: Task Force 4: Congenital Heart Disease

2. Athletes with an anomalous origin of a right coronary artery from the left sinus of Valsalva should be evaluated by an exercise stress test. For those without either symptoms or a positive exercise stress test, permission to compete can be considered after adequate counseling of the athlete and/or the athlete's parents (in the case of a minor) as to risk and benefit, taking into consideration the uncertainty of accuracy of a negative stress test *(Class IIa; Level of Evidence C)*.

Conclusion

- Anomalie coronaire congénitale : cause rare mais possible de symptomatologie d'allure angineuse chez le sportif.
- Lipothymie et syncope d'effort : possibles dans ce contexte.
- Correction de l'anomalie coronaire symptomatique : recommandée.
- Correction chirurgicale : formes gauches/< 35 ans.
- Correction percutanée : alternative possible : formes droites/>35 ans.
- Reprise possible activité sportive après 3 mois : asymptomatique/absence ischémie myocardique.
- Conseils : activité sportive non en solitaire/si possible proche

MERCI