

La cardiopathie atriale.

Mathieu Bernier, B.Pharm, MD FRCPC, FACC

SSVQ 23 octobre 2020



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UNIVERSITÉ
LAVAL

Faculté de médecine

Conflits d'intérêts

- Consultant CV pour Novartis en sclérose en plaque
- Consultant CV
 - Novartis
 - Servier
- Conférencier/ comité aviseurs
 - Novartis
 - Servier
 - Astra-Zénéca



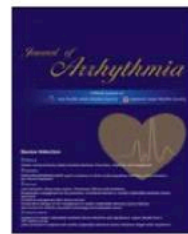
Objectifs

- Définir la cardiopathie atriale
- Identifier les principaux marqueurs de cette dernière
- Étoffer l'évaluation du risque de la cardiopathie atriale



Concept 2016

Journal of Arrhythmia 32 (2016) 247–278



Contents lists available at [ScienceDirect](#)

Journal of Arrhythmia

journal homepage: www.elsevier.com/locate/joa



CrossMark

EHRA/HRS/APHRS/SOLAECE expert consensus on Atrial cardiomyopathies: Definition, characterisation, and clinical implication ☆, ☆ ☆

Andreas Goette, (EHRA chair)^{a,*}, Jonathan M. Kalman, (APHRS co-chair)^{b,**}, Luis Aguinaga, (SOLAECE co-chair)^{c,***,1}, Joseph Akar^d, Jose Angel Cabrera^e, Shih Ann Chen^f, Sumeet S. Chugh^g, Domenico Corradi^h, Andre D'Avilaⁱ, Dobromir Dobrev^j, Guilherme Fenelon^k, Mario Gonzalez^l, Stephane N. Hatem^m, Robert Helmⁿ, Gerhard Hindricks^o, Siew Yen Ho^p, Brian Hoit^q, Jose Jalife^r, Young-Hoon Kim^s, Gregory Y.H. Lip^t, Chang-Sheng Ma^u, Gregory M. Marcus^v, Katherine Murray^w, Akihiko Nogami^x, Prashanthan Sanders^y, William Uribe^z, David R. Van Wagoner^{aa}, Stanley Nattel, (HRS co-chair)^{ab,ac,****}



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Est-ce que ça existe vraiment?

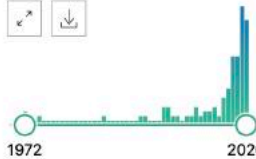
PubMed.gov "atrial cardiomyopathy" Search

Advanced Create alert Create RSS User Guide

Save Email Send to Sorted by: Best match Display options

MY NCBI FILTERS 107 results

RESULTS BY YEAR



TEXT AVAILABILITY

- Abstract
- Free full text
- Full text

ARTICLE ATTRIBUTE

- Associated data

ARTICLE TYPE

- Books and Documents
- Clinical Trial
- Meta-Analysis
- Randomized Controlled Trial
- Review
- Systematic Review

PUBLICATION DATE

- 1 year
- 5 years

1 **Atrial Cardiomyopathy: A Useful Notion in Cardiac Disease Management or a Passing Fad?**
Guichard JB, Nattel S.
J Am Coll Cardiol. 2017 Aug 8;70(6):756-765. doi: 10.1016/j.jacc.2017.06.033.
PMID: 28774383 [Free article.](#) [Review.](#)
The term **atrial cardiomyopathy**, which has been used sporadically in the medical literature, was recently the subject of a detailed Consensus Document prepared by representatives of the European Heart Rhythm Association, Heart Rhythm Society, Asia-Pacific Heart Rhyth ...

2 **Genetics of atrial cardiomyopathy.**
Fatkin D, Huttner IG, Johnson R.
Curr Opin Cardiol. 2019 May;34(3):275-281. doi: 10.1097/HCO.0000000000000610.
PMID: 30672791
Although traditionally considered a primary **atrial** disorder, **atrial cardiomyopathy** was recently redefined to include secondary **atrial** remodelling. ...Our aim was to evaluate the potential contribution of genetics to **atrial cardiomyopathy**. ...

3 **Clinical importance of atrial cardiomyopathy.**
Hammwöhner M, Bukowska A, Mahardika W, Goette A.
Int J Cardiol. 2019 Jul 15;287:174-180. doi: 10.1016/j.ijcard.2018.11.121. Epub 2018 Nov 28.
PMID: 30527991 [Review.](#)
It is based on patient age, prior thromboembolic events, and clinical comorbidities, but not based on pathophysiological changes in different types of **atrial cardiomyopathy** (ACM) as classified in the expert consensus on ACM published in 2016. The impact of different ...

4 **Is There a Role for Genes in Exercise-Induced Atrial Cardiomyopathy?**
Fatkin D, Cox CD, Huttner IG, Martinac B.
Heart Lung Circ. 2018 Sep;27(9):1093-1098. doi: 10.1016/j.hlc.2018.03.028. Epub 2018 Apr 9.
PMID: 29706494 [Review.](#)
In a subset of athletes, there is a predilection for **atrial** involvement and the risk of **atrial** fibrillation (AF) is increased. The mechanisms underpinning exercise-induced **atrial cardiomyopathy** have yet to be fully elucidated and the contribution of an ...



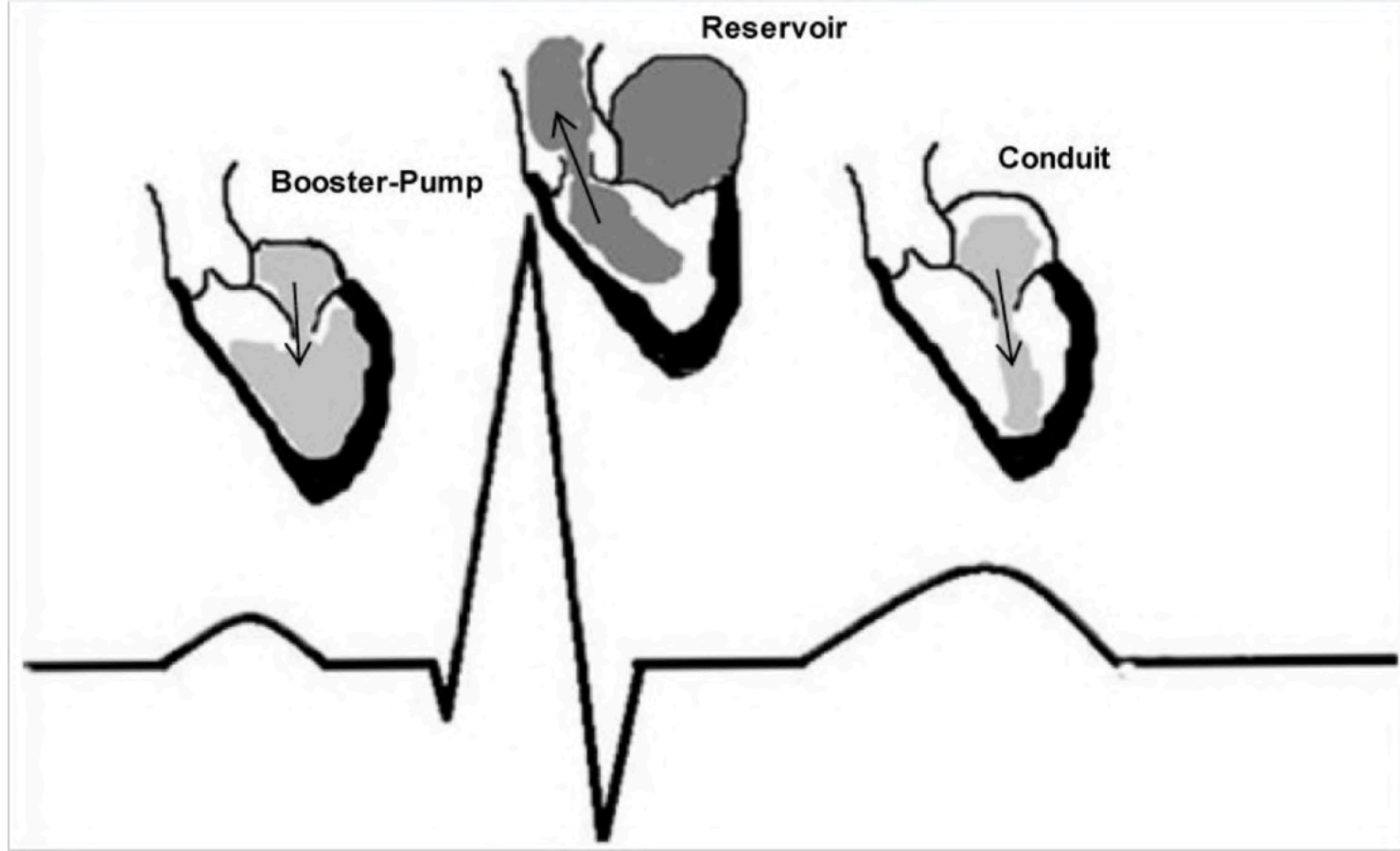
Définition

- **'Any complex of structural, architectural, contractile or electrophysiological changes affecting the atria with the potential to produce clinically-relevant manifestations'**

EHRA/HRS/APHRS/SOLAECE expert consensus on Atrial cardiomyopathies: Definition, characterisation, and clinical implication
Andreas Goette et al.
Journal of Arrhythmia 32 (2016) 247–278



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Merhzad et al. Int. J. Mol. Sci. **2014**, *15*(9), 15146-15160

Fonctions auriculaires

Cardiopathie atriale et neurologie

- Dysfonction auriculaire et FA
- FA et risque embolique
- AVC

- Est il possible de raffiner notre évaluation du risque embolique si presence d'anomalies auriculaires suggestive de "cardiopathie atriale" ?



Risque

- CHA₂DS₂-Vasc prédicteur événement chez IC sans FA
- CHA₂DS₂-Vasc corrèle avec la présence d'écho spontané de contraste (SM sans FA)

Thromboembolic risk stratification of patients hospitalized with heart failure in sinus rhythm: a nationwide cohort study

Emil Wolsk^{1*}, Morten Lamberts¹, Morten L. Hansen¹, Paul Blanche², Lars Køber³, Christian Torp-Pedersen⁴, Gregory Y. H. Lip^{5,†}, and Gunnar Gislason^{1,6,†}

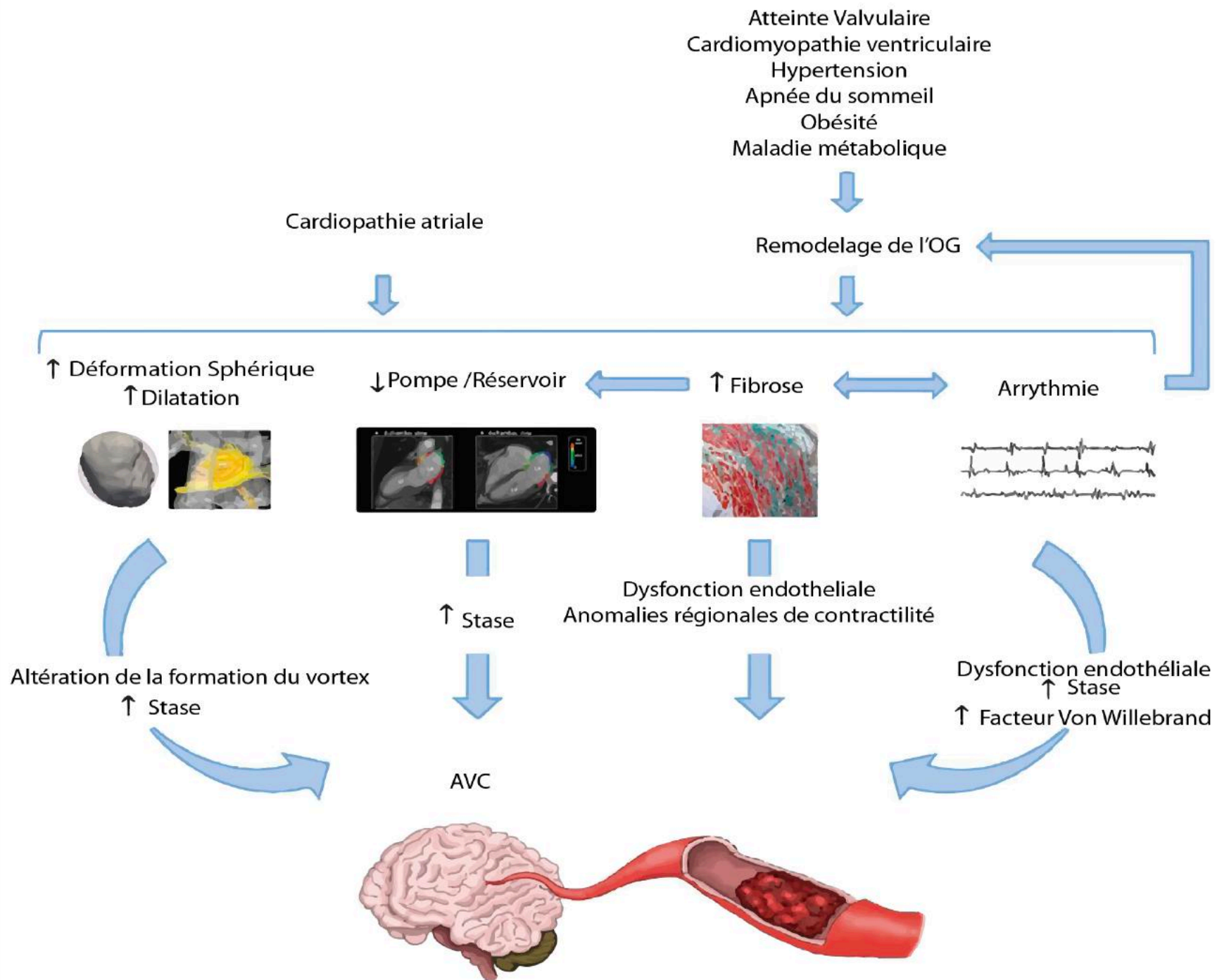
¹Department of Cardiology, Gentofte Hospital, University of Copenhagen, Gentofte, Denmark; ²Department of Biostatistics, University of Copenhagen, Copenhagen, Denmark;

³The Heart Centre, Department of Cardiology, Rigshospitalet, Copenhagen, Denmark; ⁴Institute of Health, Science and Technology, Aalborg University, Aalborg, Denmark;

⁵University of Birmingham Centre for Cardiovascular Sciences, City Hospital, Birmingham, UK; and ⁶The National Institute of Public Health, University of Southern Denmark, Odense, Denmark



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Cardiopathie
atriale et
neurologie

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Subclinical Atrial Fibrillation and the Risk of Stroke

Jeff S. Healey, M.D., Stuart J. Connolly, M.D., Michael R. Gold, M.D.,
Carsten W. Israel, M.D., Isabelle C. Van Gelder, M.D.,
Alessandro Capucci, M.D., C.P. Lau, M.D., Eric Fain, M.D., Sean Yang, M.Sc.,
Christophe Bailleul, M.D., Carlos A. Morillo, M.D., Mark Carlson, M.D.,
Ellison Themeles, M.Sc., Elizabeth S. Kaufman, M.D.,
and Stefan H. Hohnloser, M.D., for the ASSERT Investigators*

ABSTRACT



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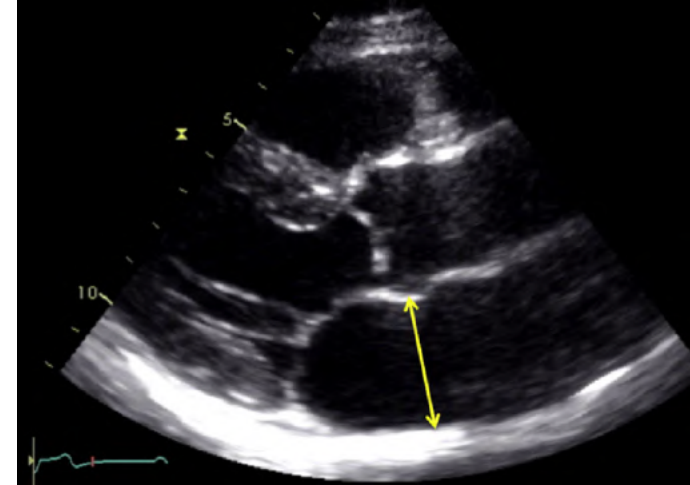
Temporalité

- Très imparfaite
- Suggère que des éléments indépendants additionnels
 - Hypocontractilité auriculaire
 - Dysfonction endothéliale
- A l'extrême....

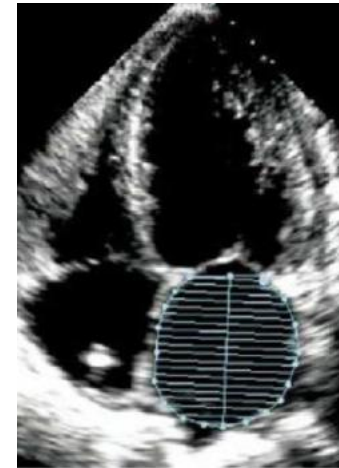


Mesures accessibles de dysfonction auriculaire

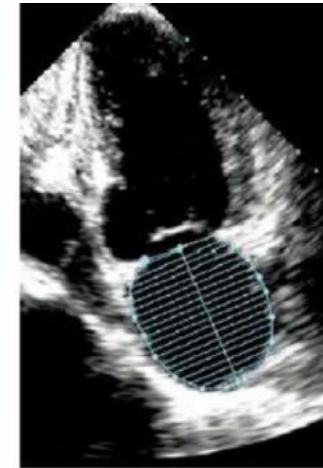
- Taille de l'OG
 - Linéaire en PSG
 - Volumétrique.



40 mm



A4C



A2C

34 ml/m²



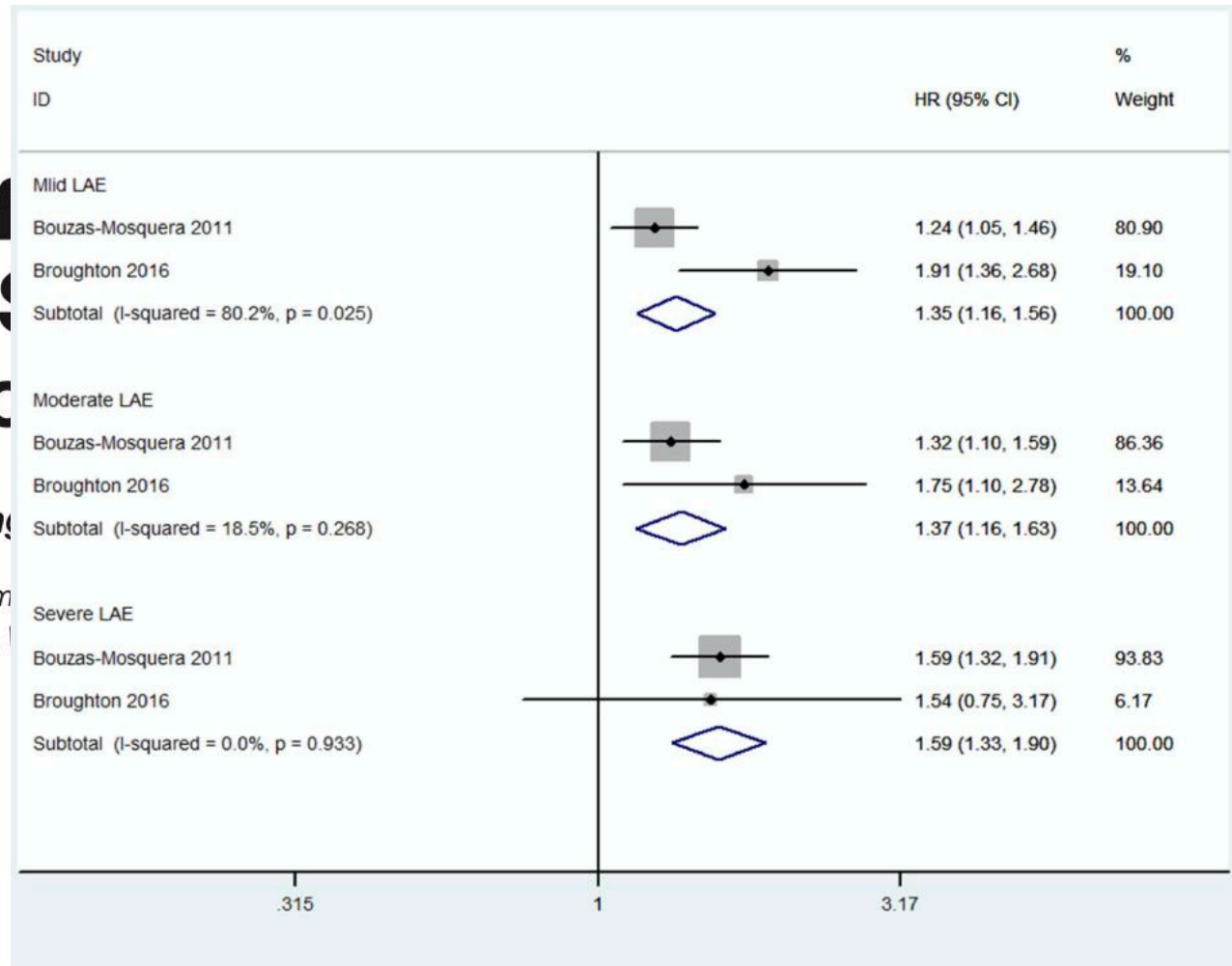
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Risque d'une dilatation de l'OG

Let
of S
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Yicheng

¹ Departm
Hospital,



isk

Yuan Yu^{3*}

ple's
g, China



Mesures
accessibles

Transesophageal Echocardiographic Correlates of Thromboembolism in High-Risk Patients with Nonvalvular Atrial Fibrillation

The Stroke Prevention in Atrial Fibrillation Investigators Committee on Echocardiography*

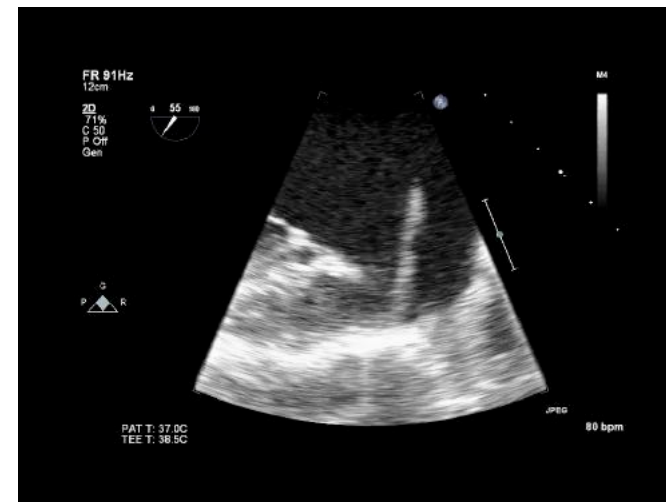
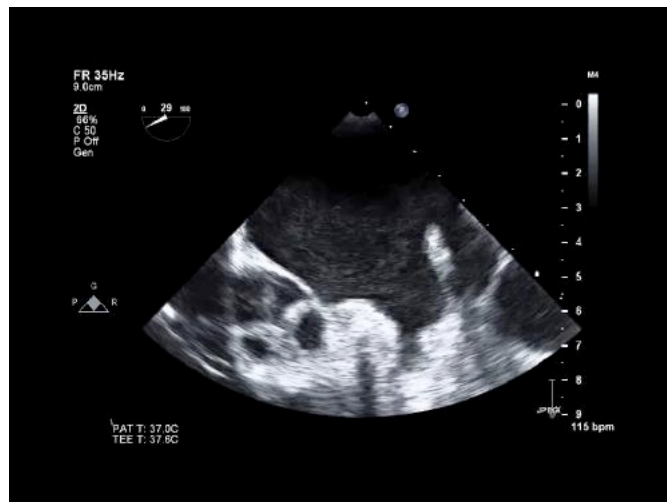
Transesophageal Echocardiographic Correlates of Clinical Risk of Thromboembolism in Nonvalvular Atrial Fibrillation ☆

Miguel Zabalgoitia MD, FACC ^a  , Jonathan L Halperin MD, FACC ^{*}, Lesly A Pearce MS [†], Joseph L Blackshear MD, FACC [‡], Richard W Asinger MD, FACC [§], Robert G Hart MD ^a, for the Stroke Prevention in Atrial Fibrillation III Investigators

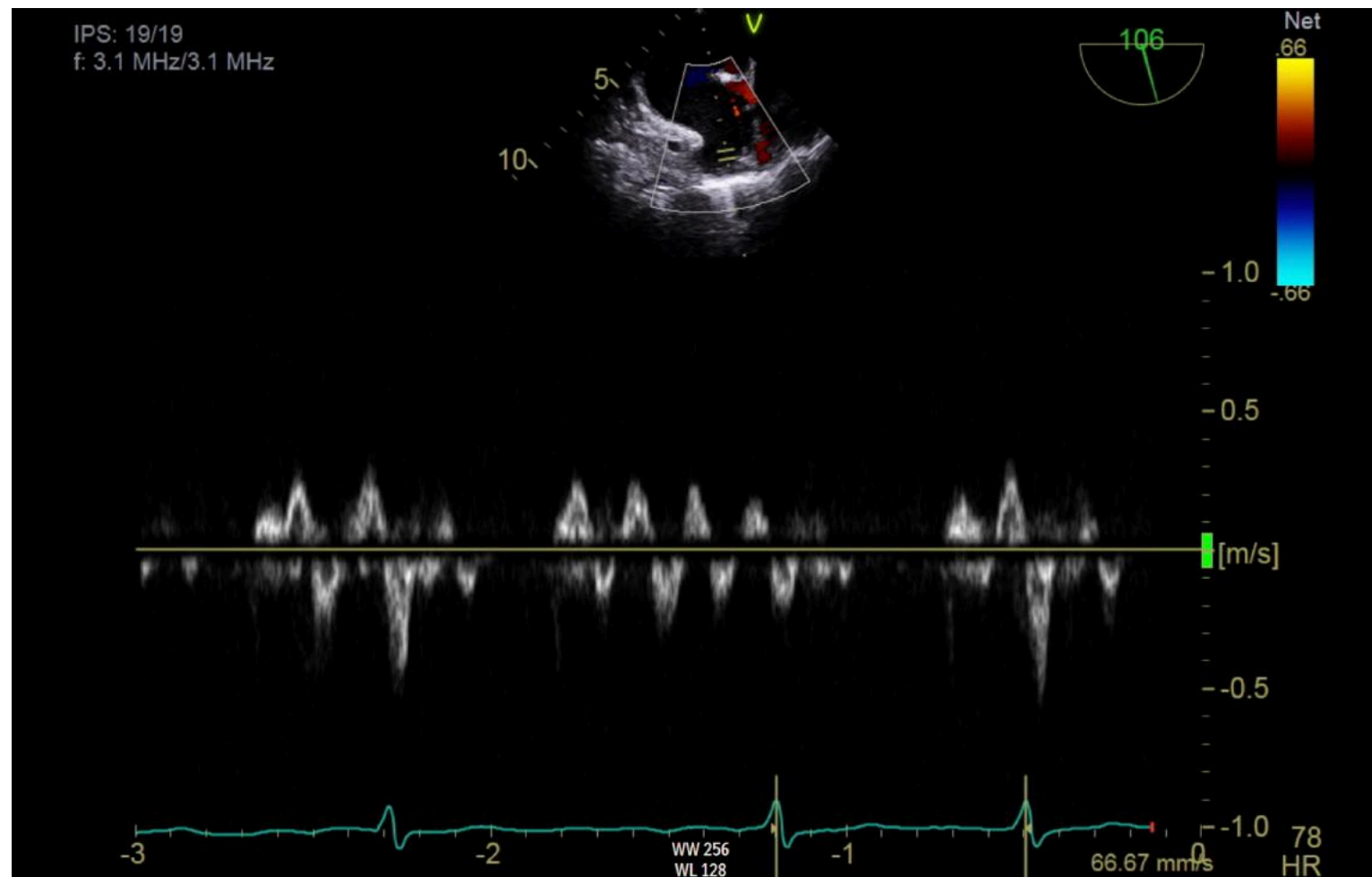


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Mesures accessibles



Mesures accessibles



Original Contribution

P-Wave Indices and Risk of Ischemic Stroke A Systematic Review and Meta-Analysis

Jinli He, BS; Gary Tse, MBBS, PhD, FESC, FACC;

PWTFV₁

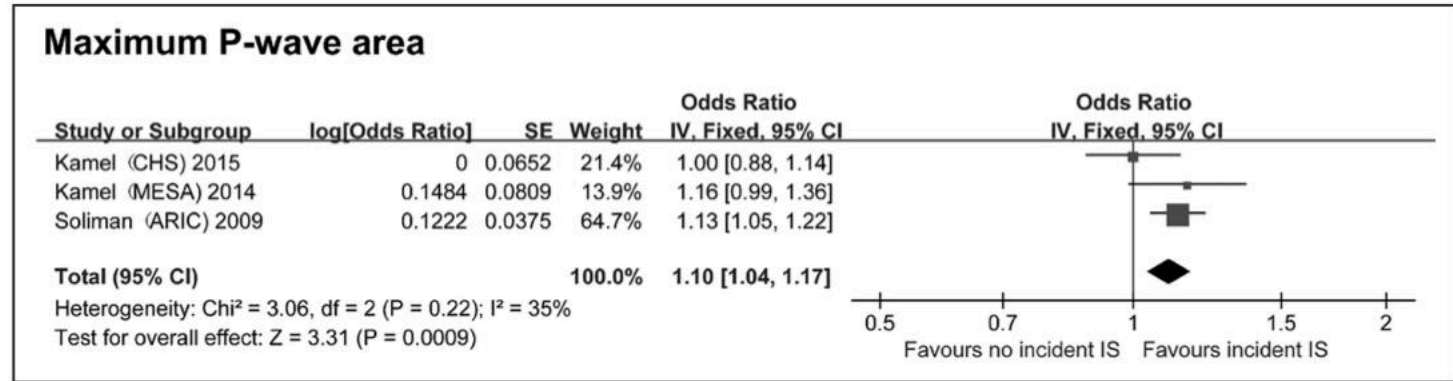


Figure 5. Forest plot demonstrating the association of maximum P-wave area (PWA), studied as a continuous variable (1 SD change), with incident ischemic stroke (IS). ARIC indicates Atherosclerosis Risk in Communities; CHS, Cardiovascular Health Study; CI, confidence interval; and MESA, Multi-Ethnic Study of Atherosclerosis.



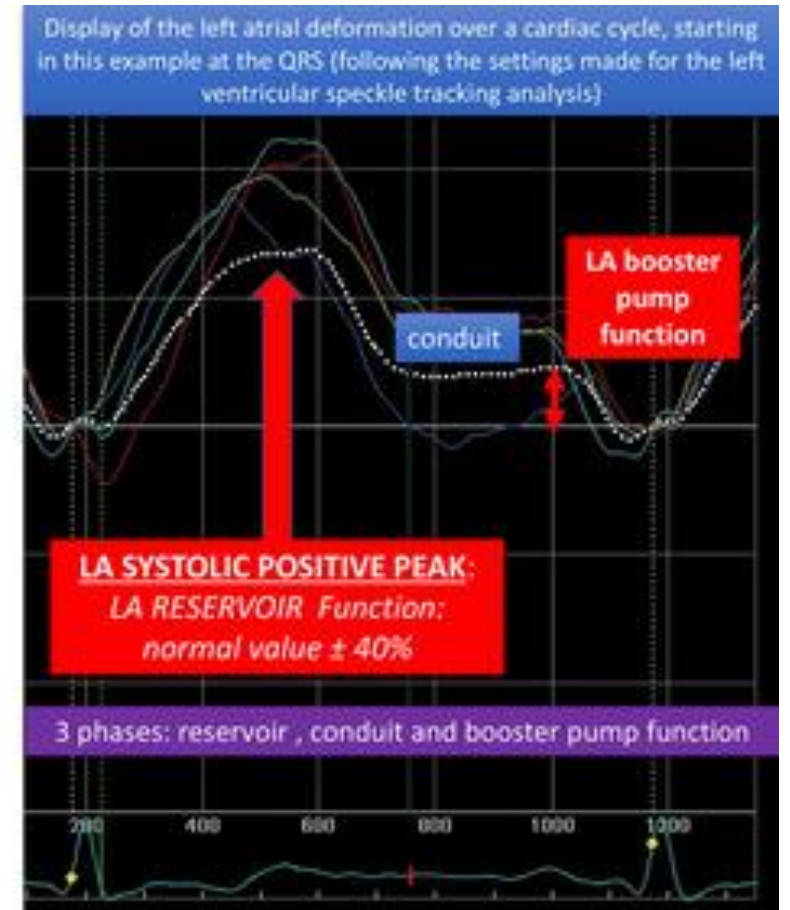
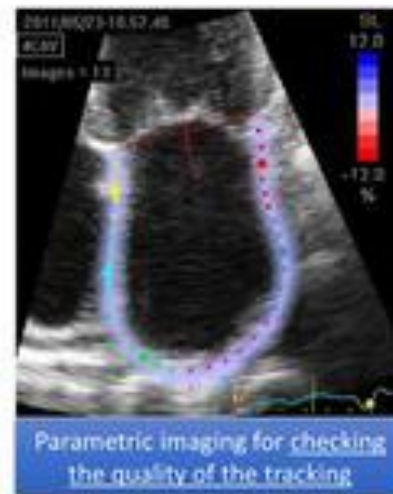
Table 2. Associations Between Markers of Atrial Cardiopathy and Incident Ischemic Stroke in Cardiovascular Health Study Participants

Marker	Model 1*	Model 2†
Individual markers		
PTFV ₁ alone‡ (n=4954)	1.08 (1.04–1.11)	1.05 (1.02–1.09)
Left atrial dimension alone§ (n=4919)	1.15 (1.03–1.29)	1.07 (0.95–1.21)
NT-proBNP alone (n=3992)	1.17 (1.11–1.24)	1.12 (1.05–1.18)

Mesures
Accessibles



Mesures moins accessibles



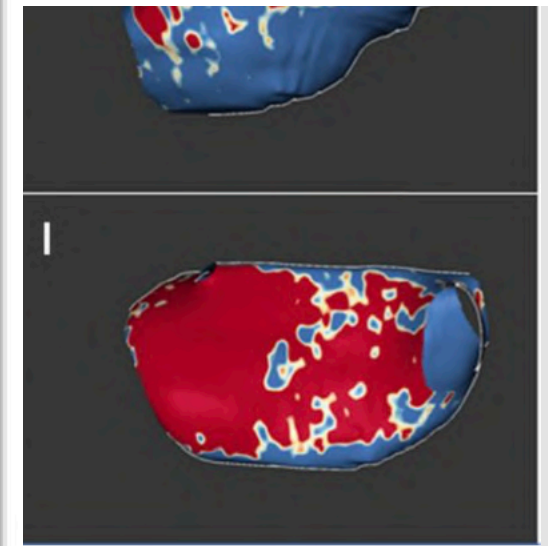
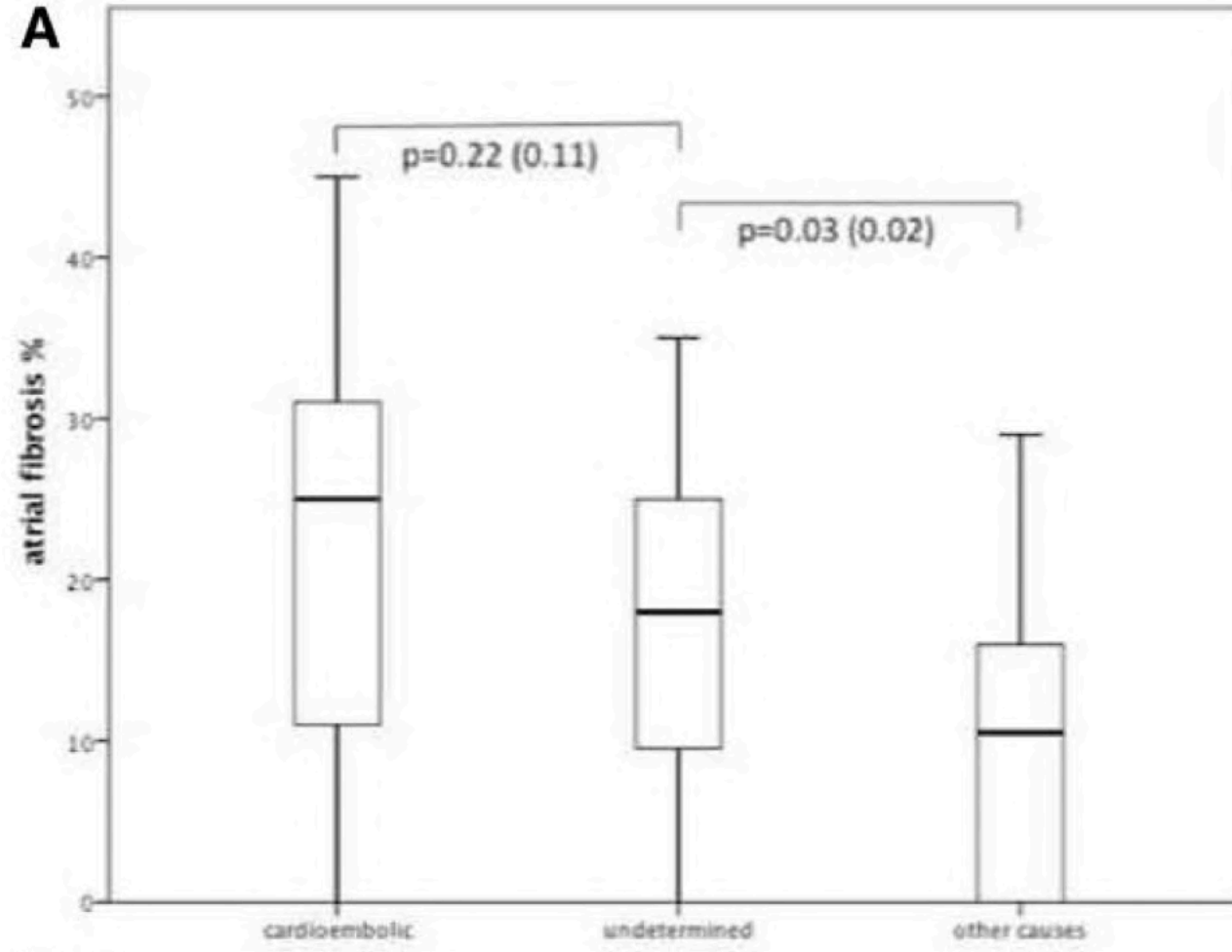
Patients With Undetermined Stroke Have Increased Atrial Fibrosis

A Case-Control Study

Ana Catarina
João Pedro Marto,
Jo

, MD;
e-Melo, MD;

content is
accessible



Conclusions

La dysfonction auriculaire est associée à un risque embolique résiduel non adressée par nos stratégie de prevention secondaire actuelle

Elle peut se quantifier de façon simple ou complexe

Cette quantification peut nous aider à stratifier le risque embolique meme si non intégré dans les scores prognostics usuels

Recherche doit se poursuivre pour raffiner notre capacité d'identifier les plus à risque.