Polyclinique
Saint George
Groupe Kantys

Flutter peri mitral -echec de plusieurs procedures „conventionelle” arret par Alcoolisation de la Veine de Marshall (Marshall Plan)

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Nice 5.12.2023

M. CM 01/10/1961

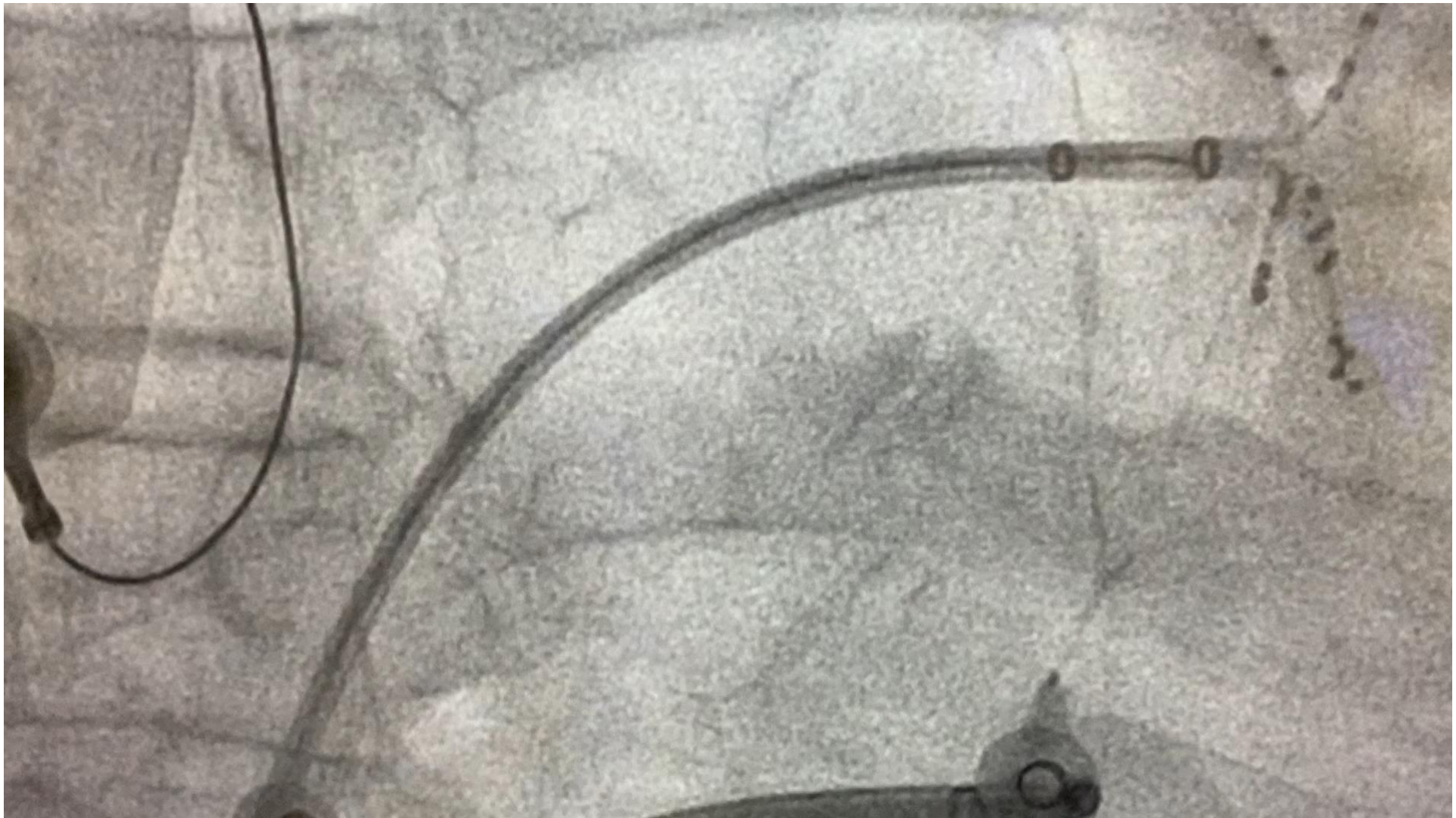
Flutter G peri mitral CMP Rythmique FE 40%

- 6 procédures d’ablation de FA persistante
- 2 Cryo, 2 RF CFAE 2 RF epi endo pour Flutter mitral
- `
- CEE avec récidive rapide, dégradation FE 40%
- Flutter atypique 230 ms proximal distal CS
-

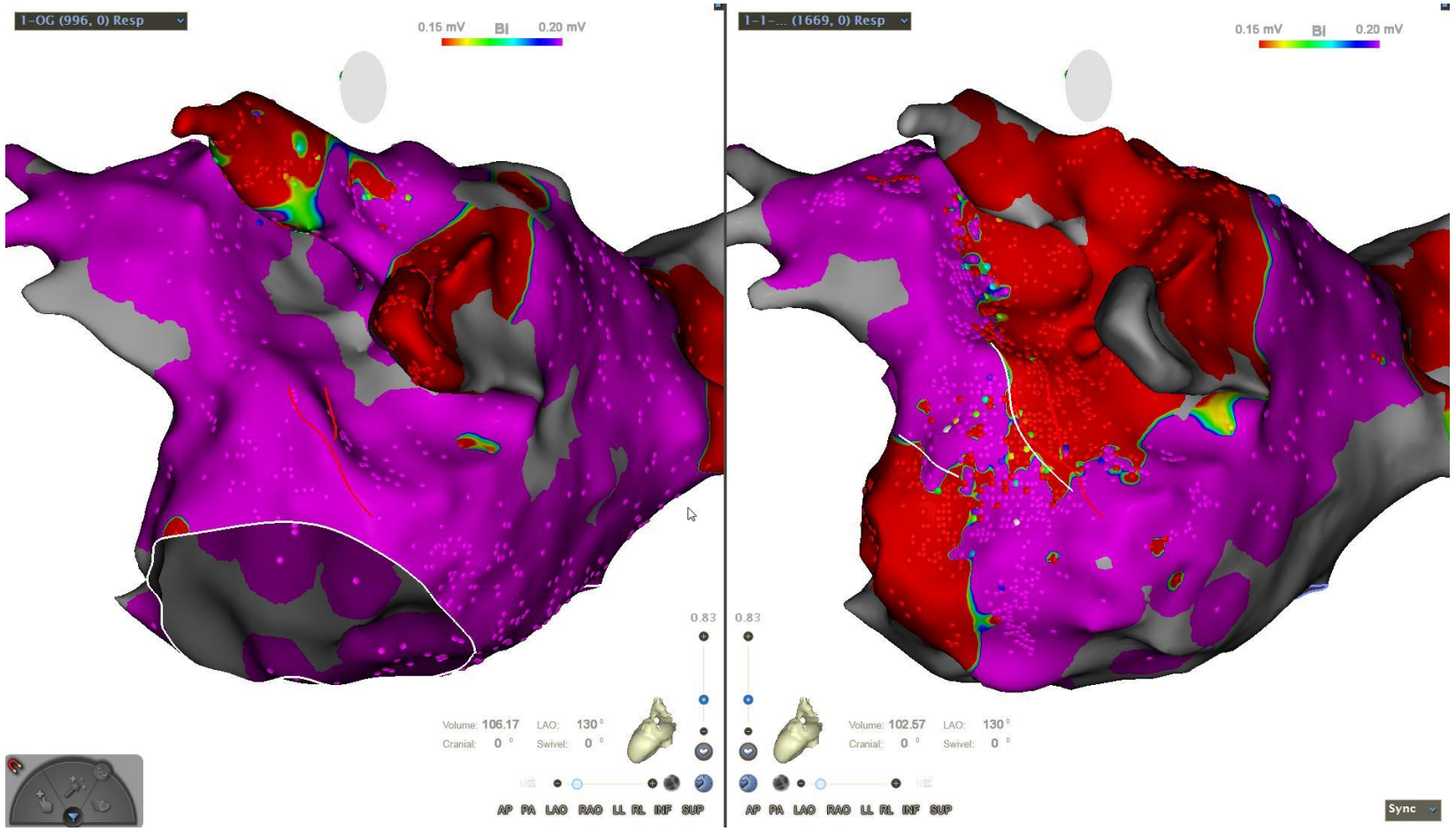
Permanent PERIMITRAL FLUTTER VOM

Achieving Acute Mitral Isthmus Block with Catheter ablation and Vein of Marshall Ethanol infusion

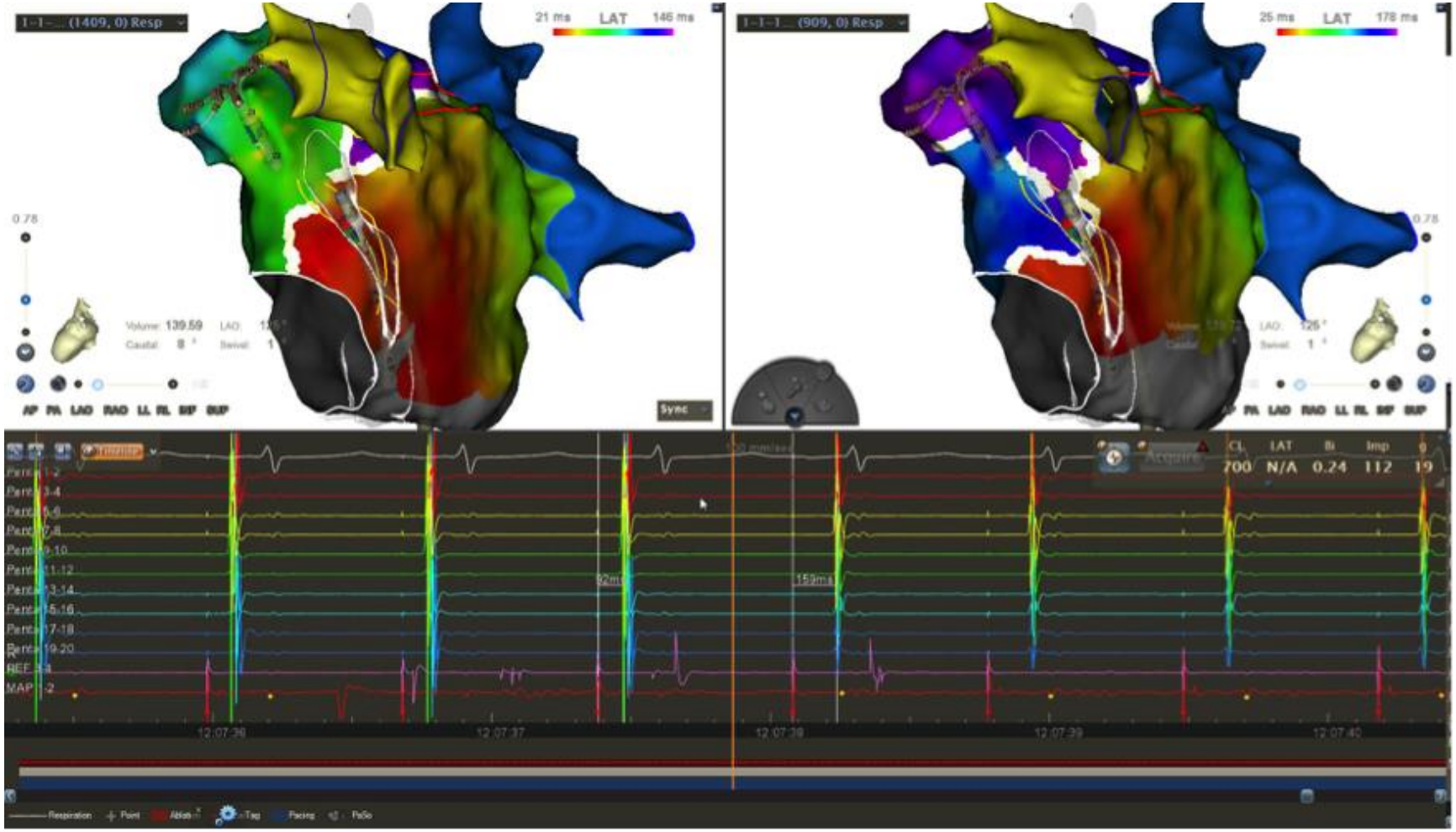
Angiographic Data



Before and After Marschall Vein EI



Endocardial Mitral isthmus Bloc



Endo Epi Mitral isthmus Bloc

M. CM 01/10/1961

Flutter G peri mitral => FE normale à 3 mois

- OG vol 131 ml
- Arret Flutter après 1 ml HO 1 minute
- Bloc epi endo sans RF
- Pas de RF endo ou epi
- RF Total 4 min Roof line
- Reprise pour Flutter du toit à 3 mois **Isthme mitral bloqué**
- Plan Marshal complet (PVI Mitrale Roof CTI)
- **En RS a 2 ans ECHO FE normale**
-

On the development of the great anterior veins in man and mammalia: including an account of certain remnants of foetal structurefound in the adult, a comparative view of these great veins in thedifferent mammalia, and an analysis of their occasional peculiarities in the human subject.

-In 1850 John Marshall first described a vestigial fold of the pericardium that contains fibrous bands, small blood vessels and nervous filaments enveloped in fat.

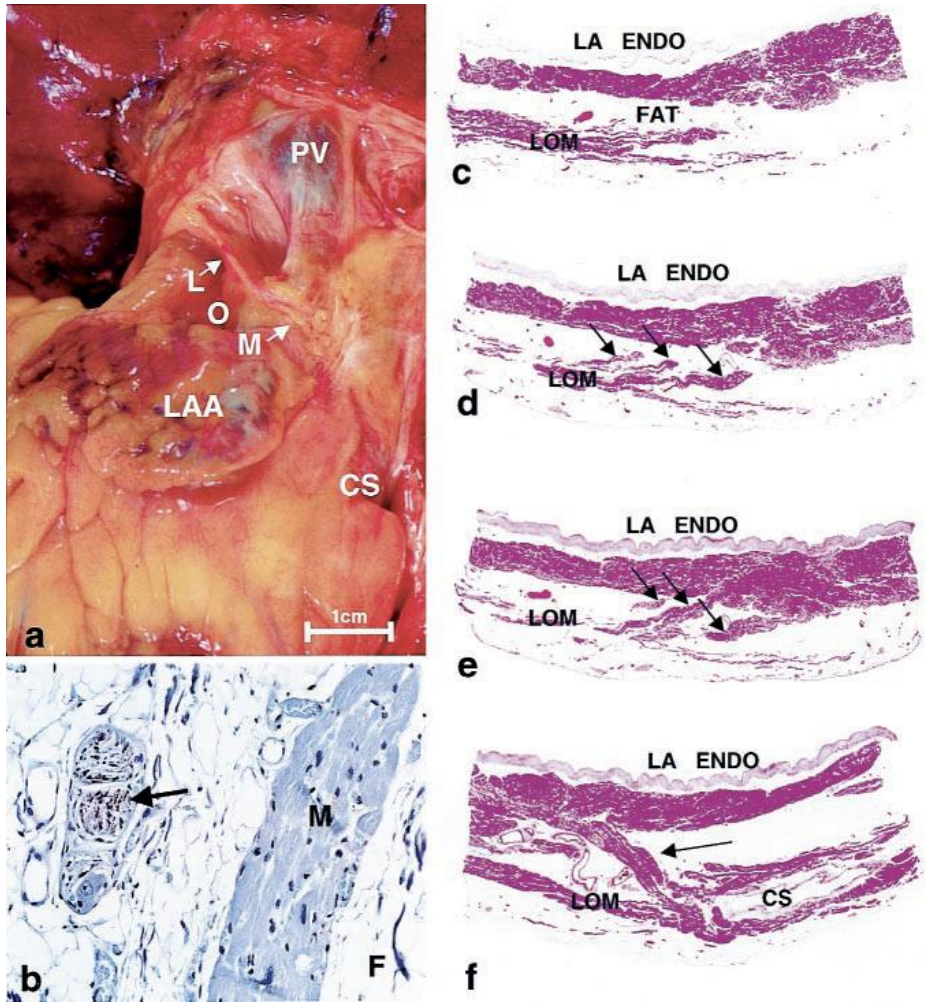
-This structure came to be known as the ligament of Marshall (LOM)

-It contains the oblique vein of Marshall (VOM) that drains into the coronary sinus

Marshall J. Phil Trans R Soc Lond 1850;140:133– 69

The Ligament of Marshall:A Structural Analysis in Human HeartsWith Implications for Atrial Arrhythmias

LOM is insulated by fat tissue with No efficacy endo or CS RF



D Kim, M Fishbein et all, JACC vol 36, 2000

Impact of Vein of Marshall Ethanol Infusion on Mitral Isthmus Block: Efficacy and Durability

- **VOM-Et** group =>152 patients **RFCA** group =>110 patients
- **Acute MI block** was more frequently achieved in the **VOM-Et group (98.7%** versus 63.6% *P*<0.001) with **shorter RFCA duration (5.00** versus 19.0 [13.6-22.0] minutes; *P*<0.001)
- FOLLOW UP 10 Mo=> 131 of 262 (50%) patients experienced recurrent AF or AT (VOM-Et group: **31.6%** versus RFCA group: **75.5%**
- 81pts underwent a repeat procedure during follow-up (**VOM-Et group: 23.3%** versus RFCA group: 65.7% [respectively; *P*<0.001).
- **durable MI block in the VOM-Et group** (**62.9%** versus 32.6% , respectively; *P*=0.008).

T Nakashima, M Haissaguerre N Derval Circ Arrhythm Electrophysiol . 2020 Dec;13(12)

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Clinical Research

Acute mitral isthmus block during catheter ablation with vein of Marshall ethanol infusion: Angiographic considerations☆

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- 122 pts (115 Persistant AF, 7 Mitral Flutter, 66 primo RF)
- Bidirectional MI Block => 115 patients **(94.2%)** 6-10 ml HO
- VOM diameter ostium 1.8 ± 0.6mm
- VOM length was 18.6 ± 9.1mm.
- Endocardial-Epicardial MI Block **5,2 min RF** (range 0 -8 min RF)
- 3 pts with previously RF MI Block **HO only without RF**

MERCI

- **Bloc Mitral PFA**
- 2 pts sur 14 Bloc Mitral PFA uniquement
- HO et RF 14/14

N Derval AF symposium Paris 9 Nov2023