Diğer PV dışı odakların ablasyonu

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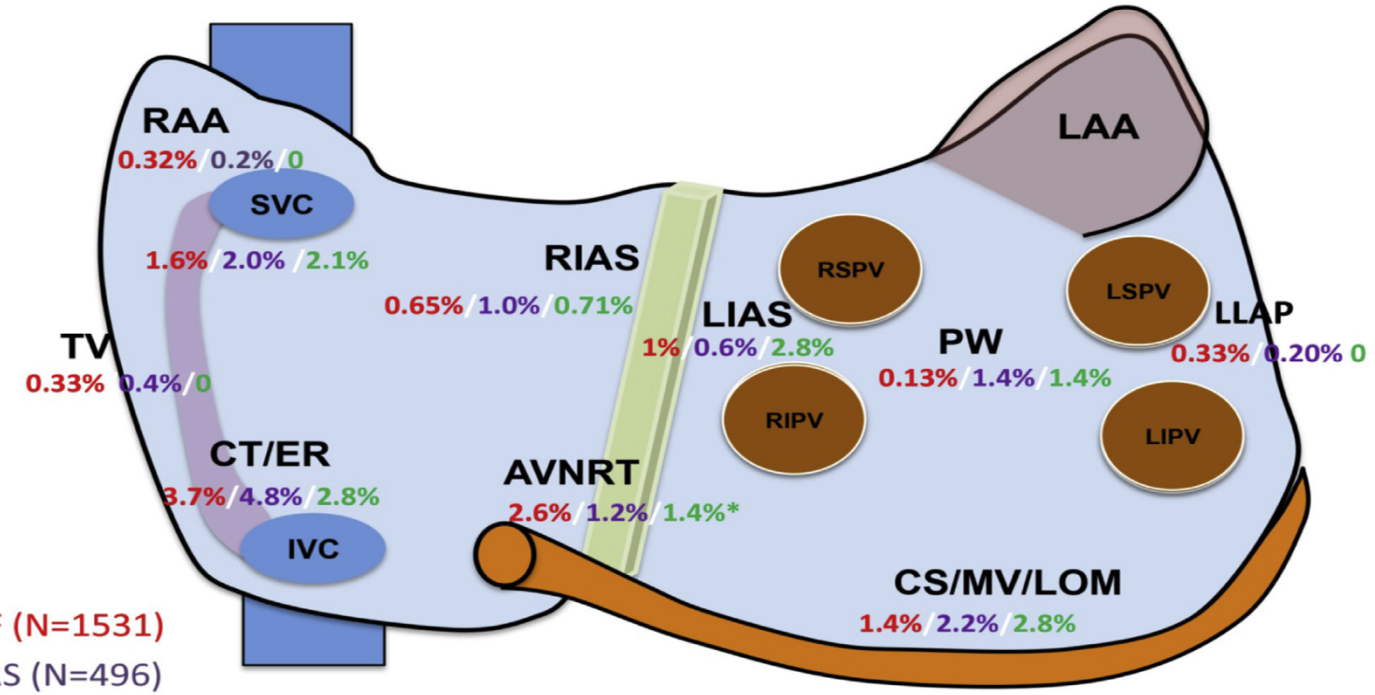
Samsun Eğitim ve Araştırma Hastanesi

PV dışı odakları

- Torasik venler (SVC, Koroner Sinüs, VOM)
- Sol atriyum posterior duvar
- Krista terminalis
- İnteratriyal septum
- Sol atriyal apendiks

RAA=right atrial appendage
TV=tricuspid valve
CT=crista terminalis
ER=eustacian ridge
SVC=superior vena cava
AVNRT=AV node reentrant tachycardia

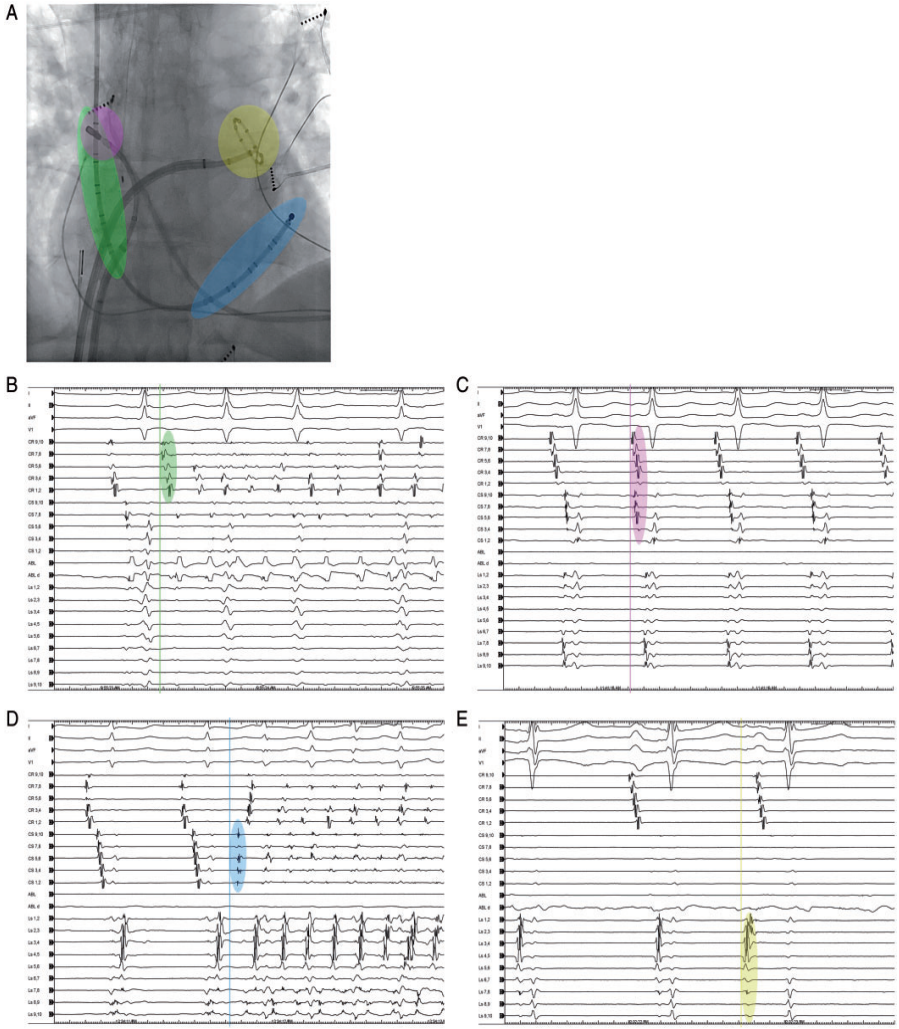
LAA=left atrial appendage
MV=mitral valve
CS=coronary sinus
LOM=ligament of Marshall
LLAP=left lateral accessory pathway
PW=posterior wall



PAF (N=1531)
PERS (N=496)
LS PERS (N=141)

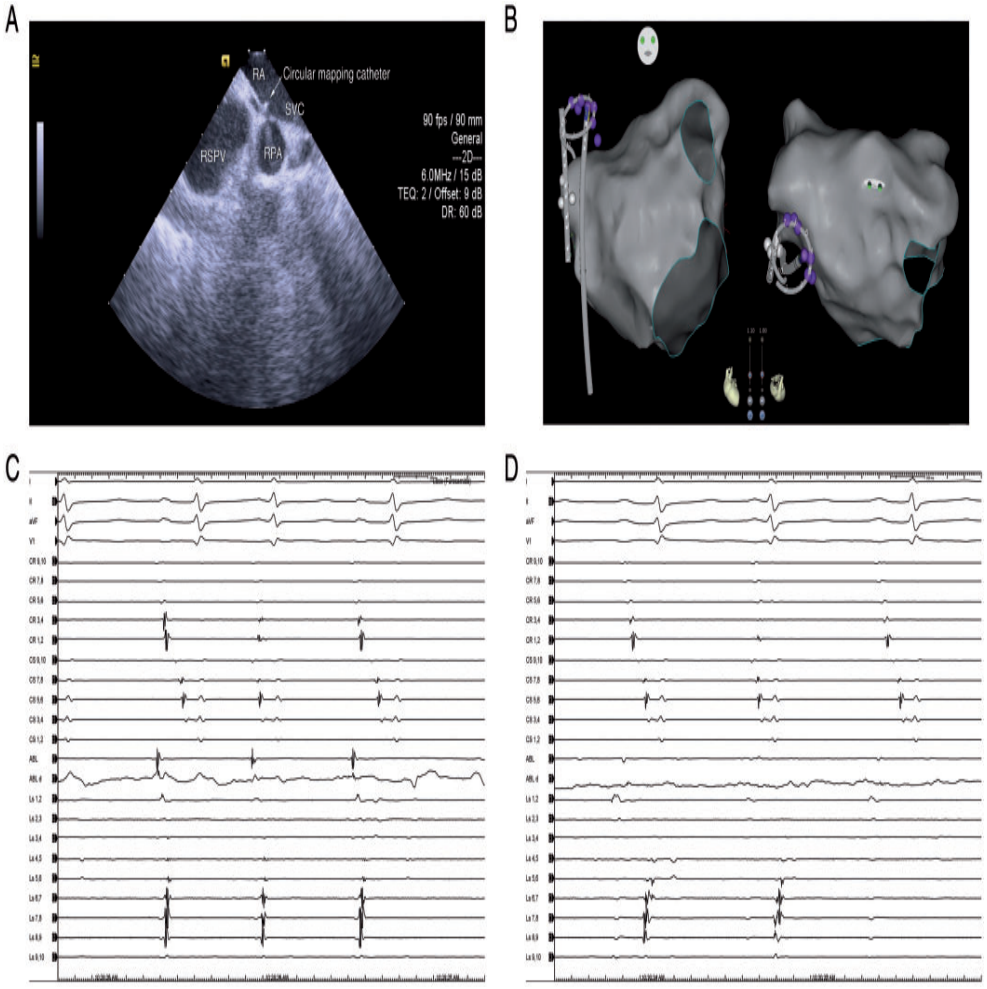
*2 patients with longstanding persistent AF

Kateter yerleşimi ve indüksiyon



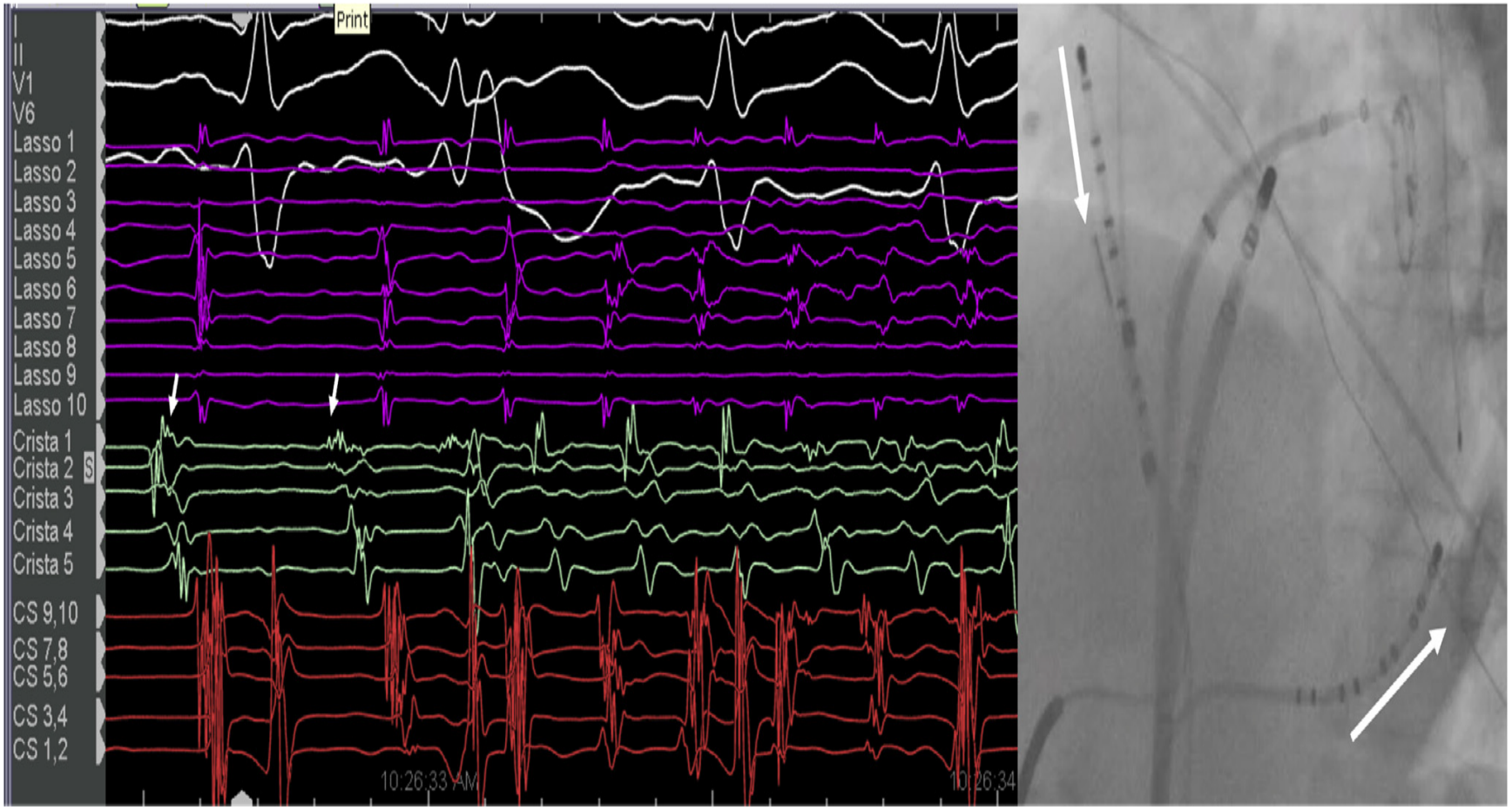
- İsoproterenol infüzyonu (10-20 mcg/dk 15 dakika)
- İsoproternol ile TA düşerse epinefrin inf.
- Derin sedasyon kaçınmak gerekir
- PsAF %60 ında non pv trigger mevcut
- PAC(<10/dk), non sustained AT, sustained AT önemli (tekrarlanabilir olmalı!)
- Antiaritmik ilaçlar en az 5 yarılanma ömründen önce kesilecek
- SVC,LAA,CS komplet izolasyon diğer Non PV trigger lara genellikle fokal ablasyon

SVC izolasyonu

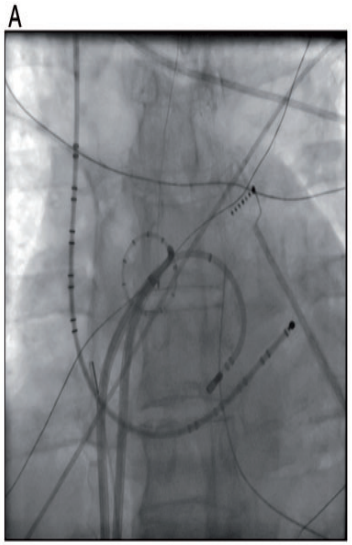


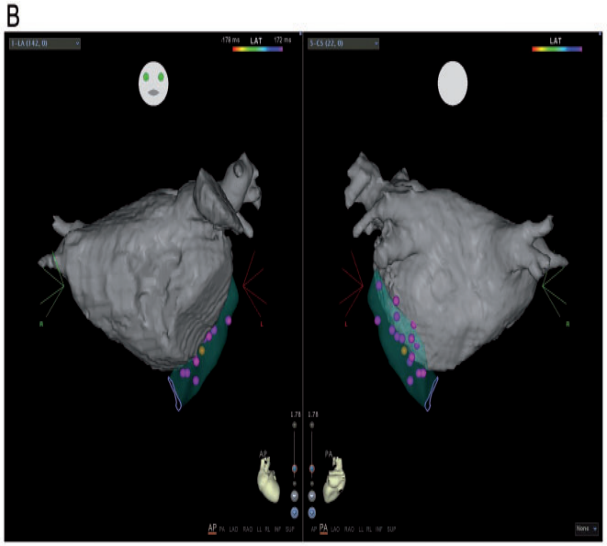
- Multipolar katater SVC-RA junction da
- Sharp SVC potansiyeli hedef
- ICE kateter yerleşimi için faydalı
- İzolasyonda segmental yaklaşım
- **SEPTAL YAKLAŞIM İLE İZOLASYON**
- **LATERAL YAKLAŞIM DA FRENİK SİNİR SİNUS NOD HASAR RİSKİ**
- Ablasyon oncesinde frenik sinir stimulasyonu
- Genel anesteziden kaçınılmalı
- Ablasyon sonunda entrance blok gösterilmeli

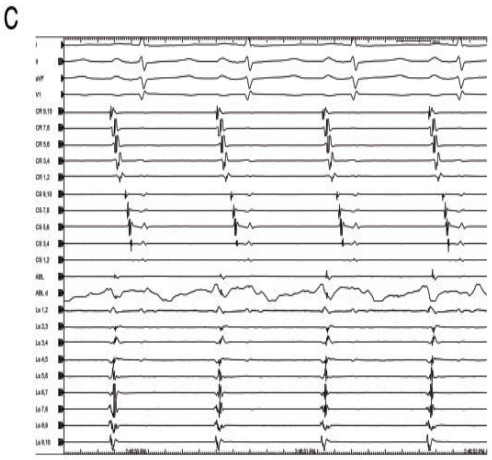
SVC izolasyonu

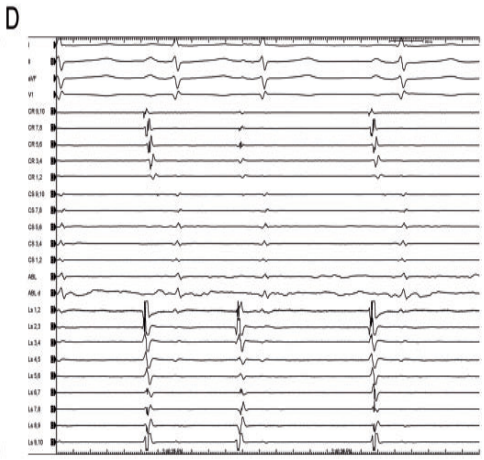


CS izolasyonu



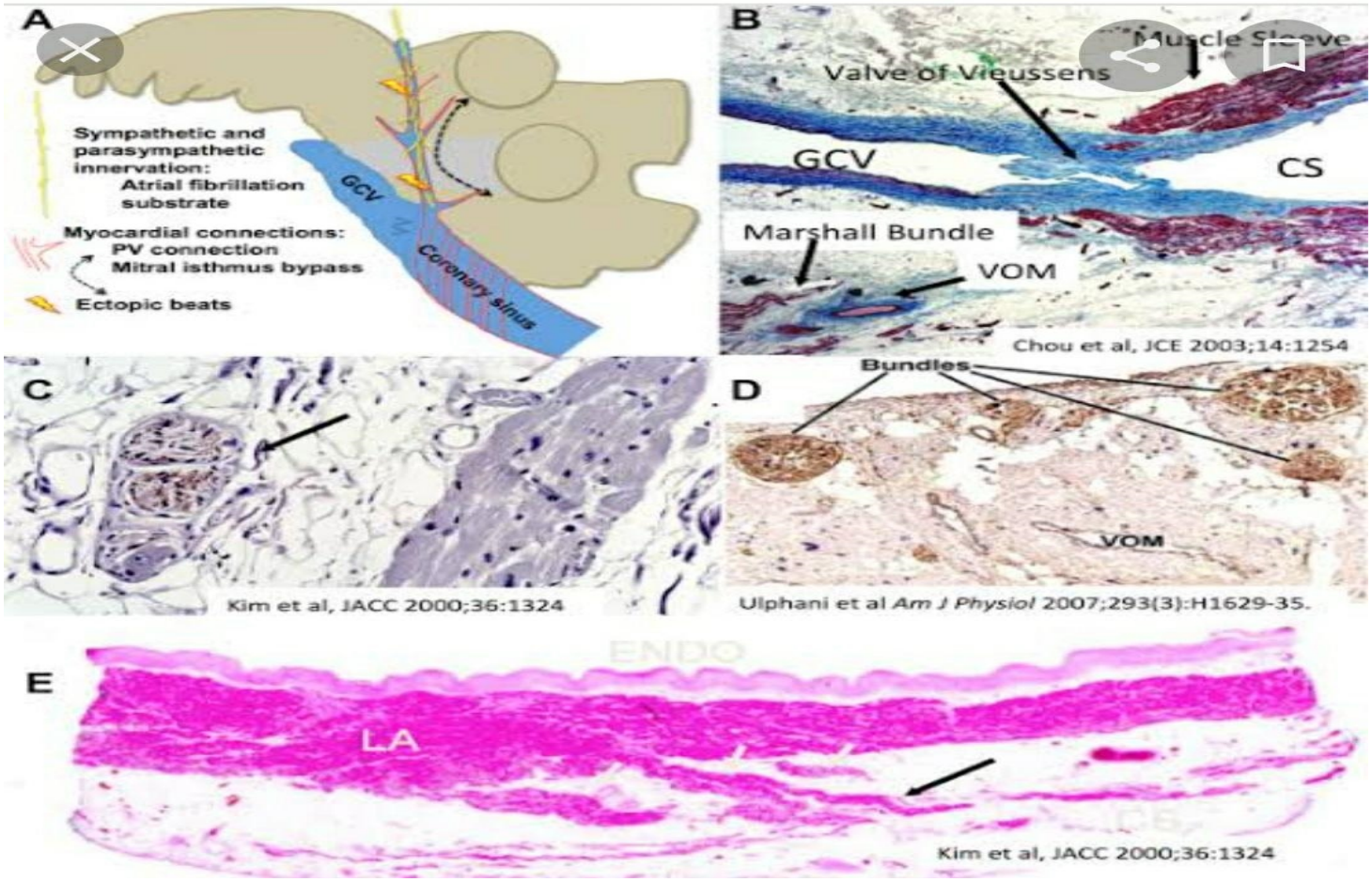






- Fokal yerine komplet izolasyon
- Endo ve Epi beraber yaklaşım
- Myokardiyal uzanım alanları hedef
- Ablasyon sonlanım noktası lokal sharp potansiyellerin kaybı veya disosiasyon
- Epikardiyal yaklaşımda kateter atriyal tarafa bakmalı (CS dalına dönme steam pop riski!
- 25-30 watt , yüksek irrigasyon (ani imp. artışına dikkat)
- CS alanında AV blok riskine dikkat
- AÖF riski bu yaklaşımda fazla

CS izolasyonu



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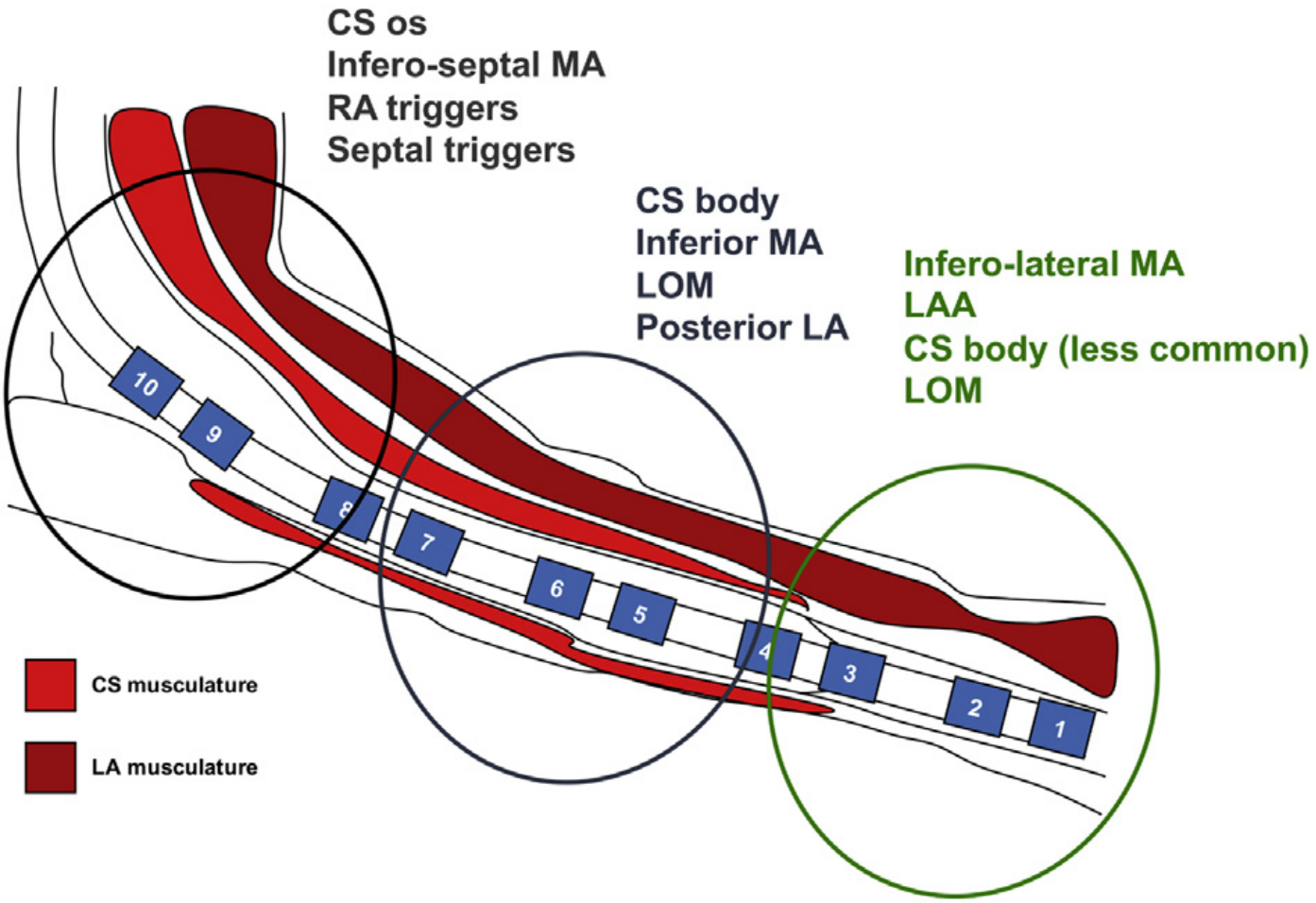
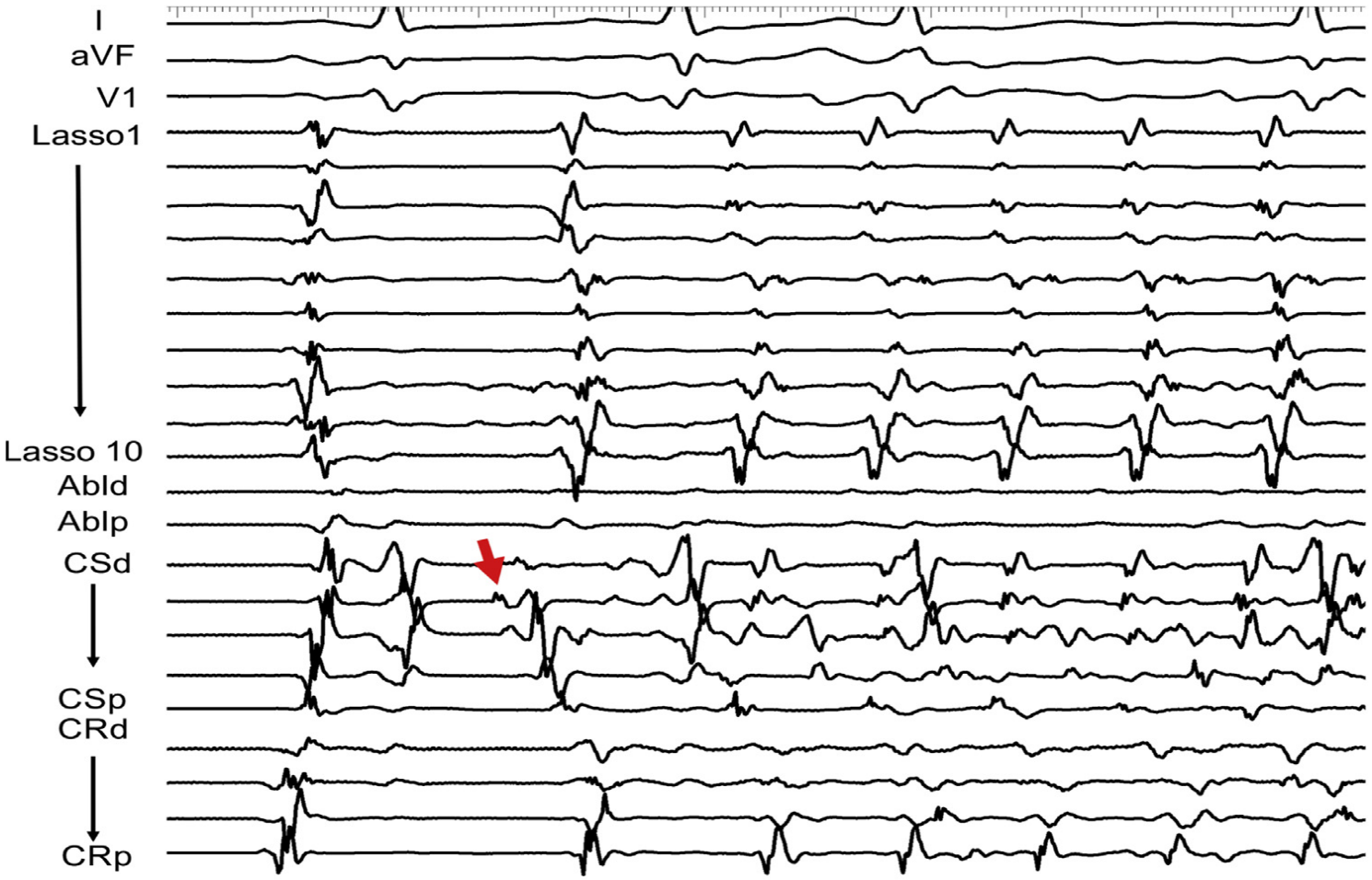
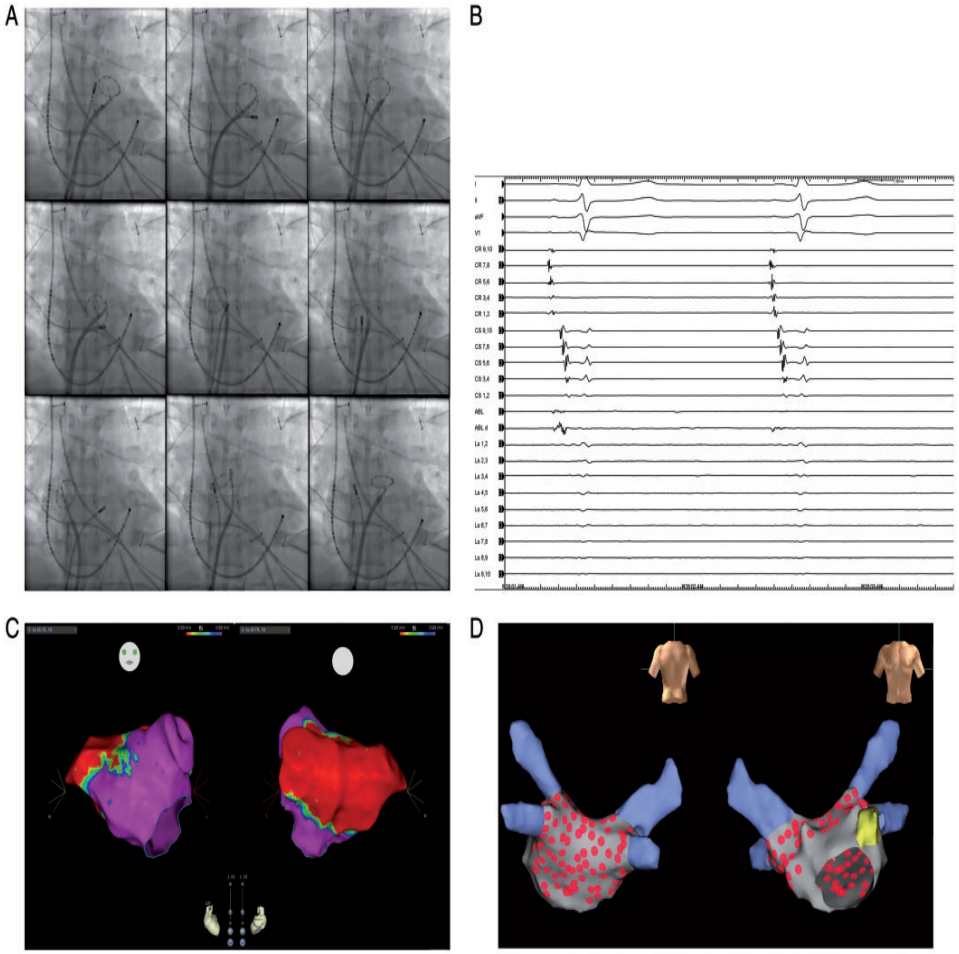


CS izolasyonu

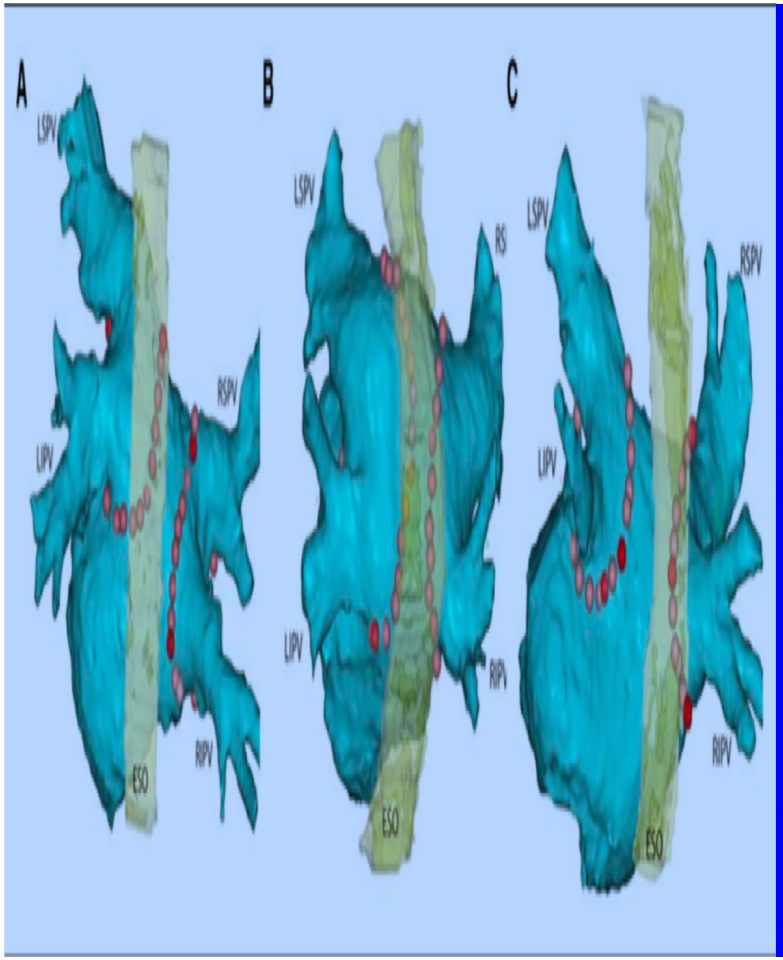


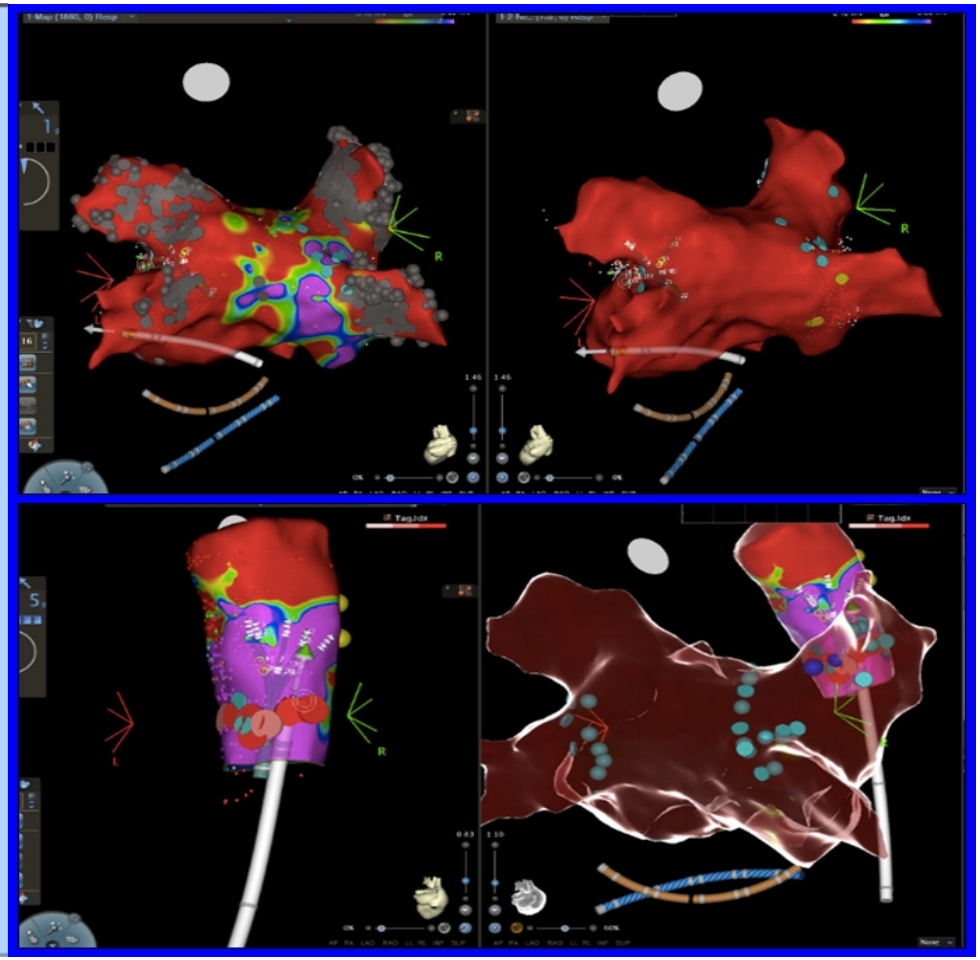
LA posterior duvar izolasyonu



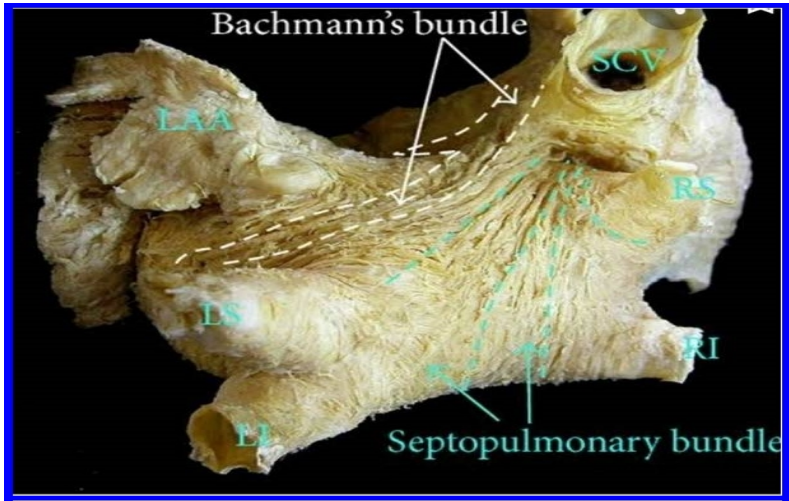
- Embriyolojik olarak PV lerin uzanımı kabul ediliyor.
- PVAI dan sonra PW izolasyonu box lezyon veya Egm temelli ablasyon ile yapılır
- Box lezyon setinin sonrasında gap ilişkili LRAT/MRAT olabilir. (RF sonrasında bidirectional blok göstermek önemli !)
- Entrance blok yetmez exit blok da gösterilmeli (20 mA 2 ms pulse width)
- SPB, PSB gibi epikardiyal baglantılar
- PW İZOLASYONU EGM TEMELLİ YAKLAŞIMDA ANTERİOR DUVAR, MİD SEPTAL VE CS ENDOKARDİYAL SAHAYA UZANABİLİR

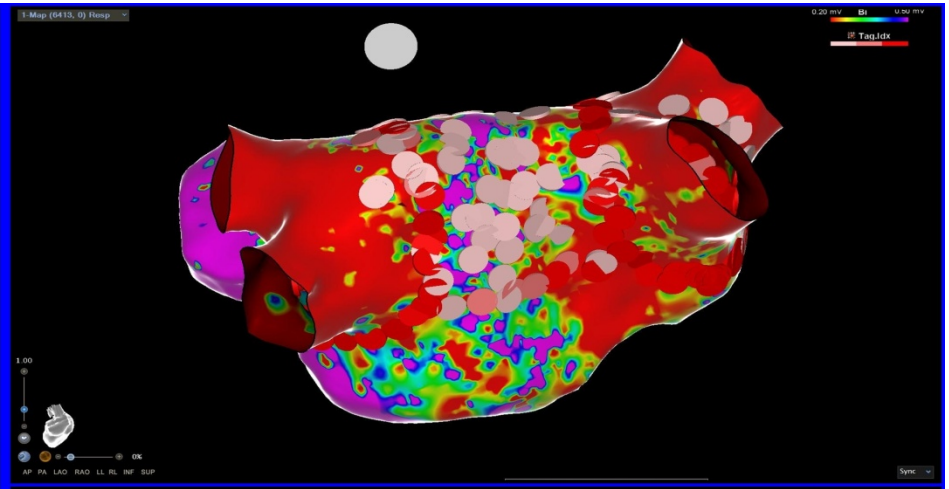
LA posterior duvar izolasyonu

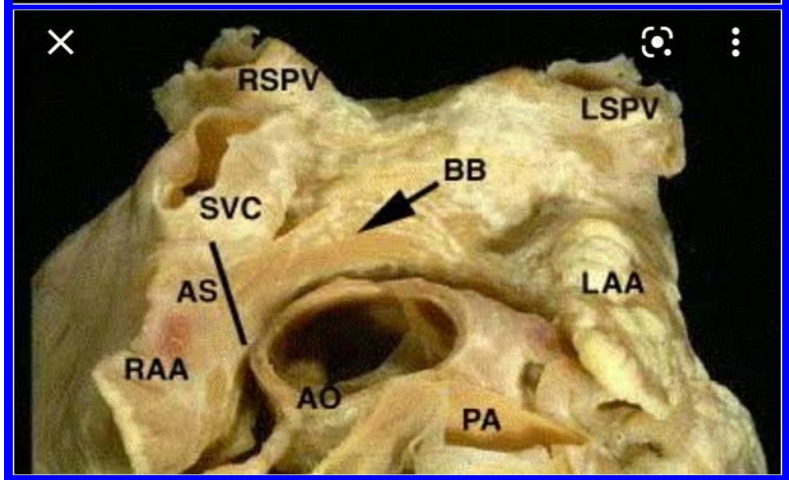


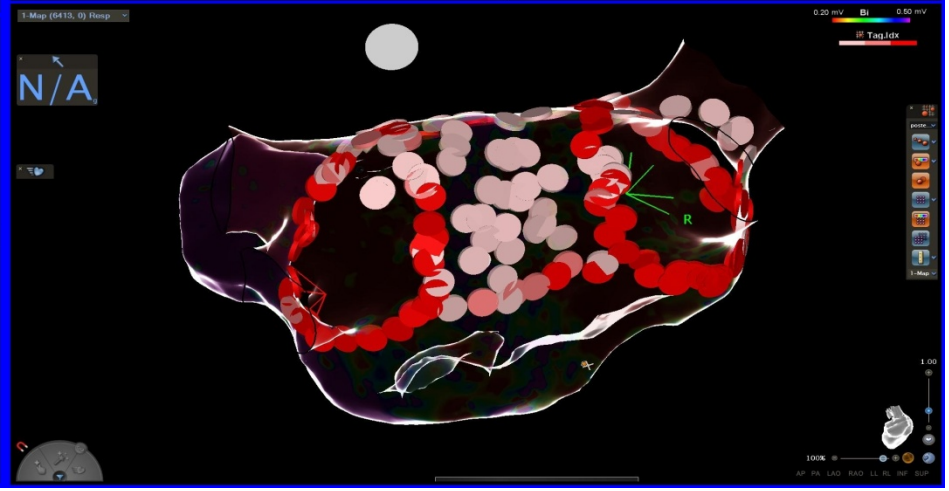


LA posterior duvar izolasyonu

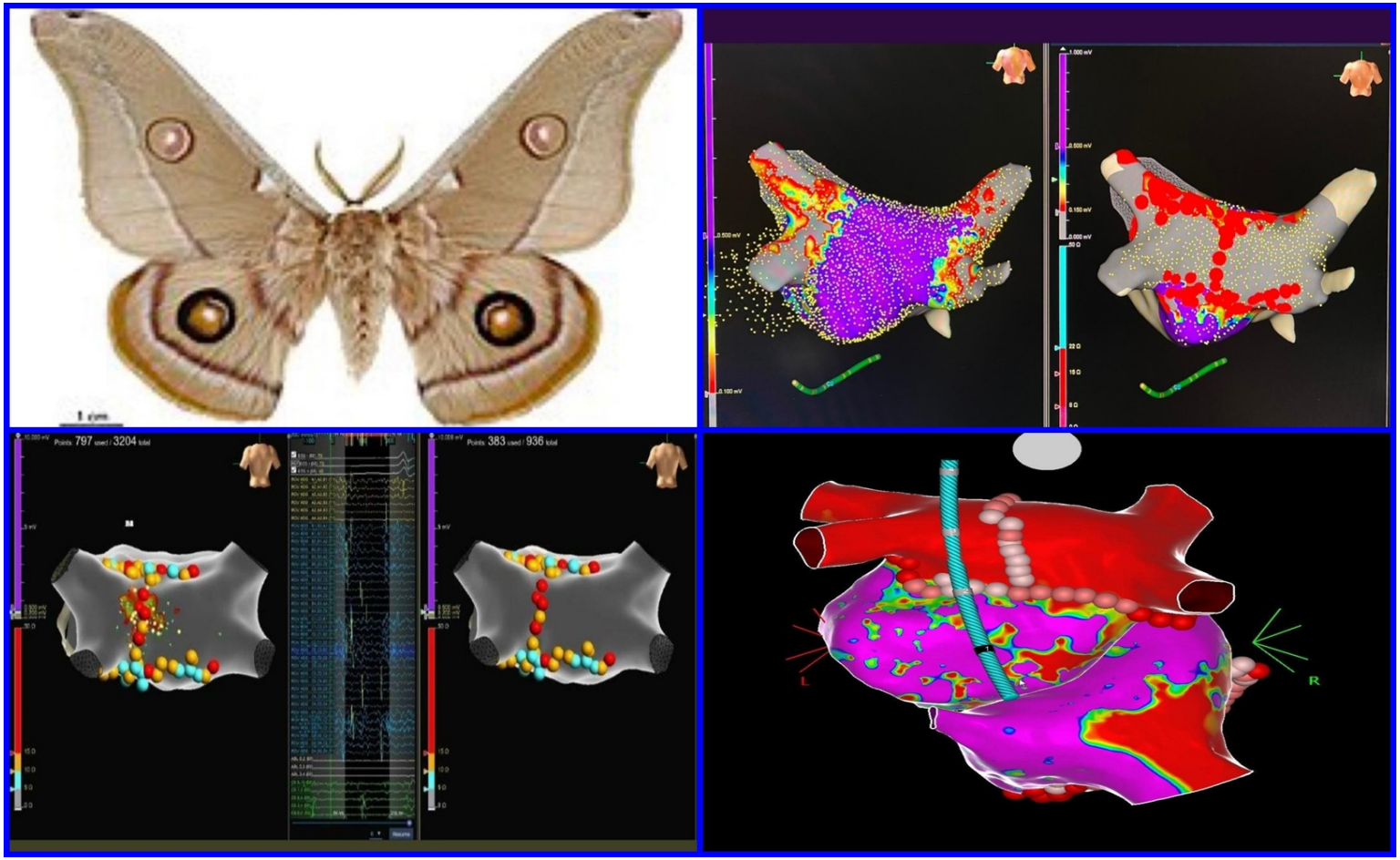




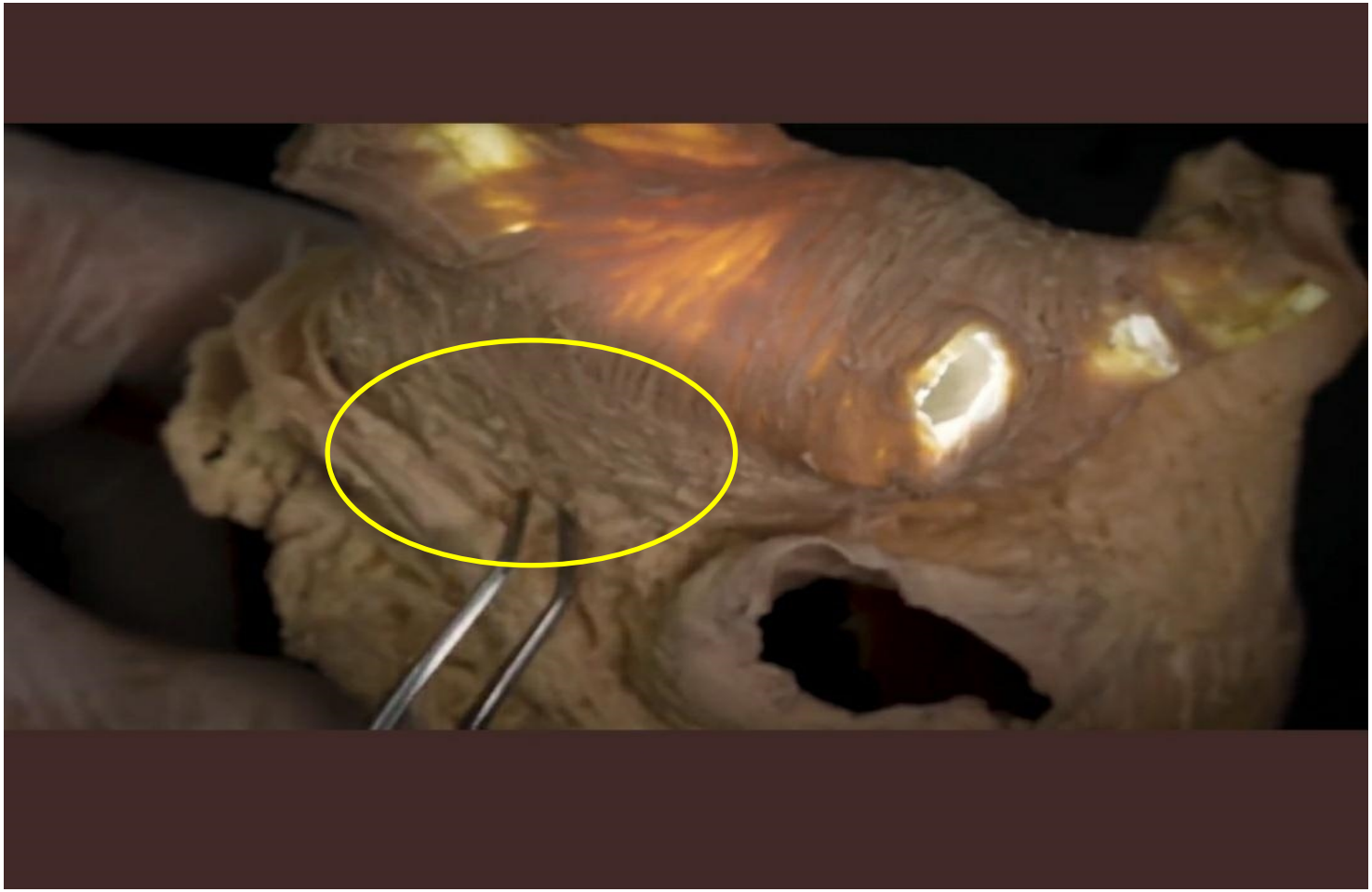




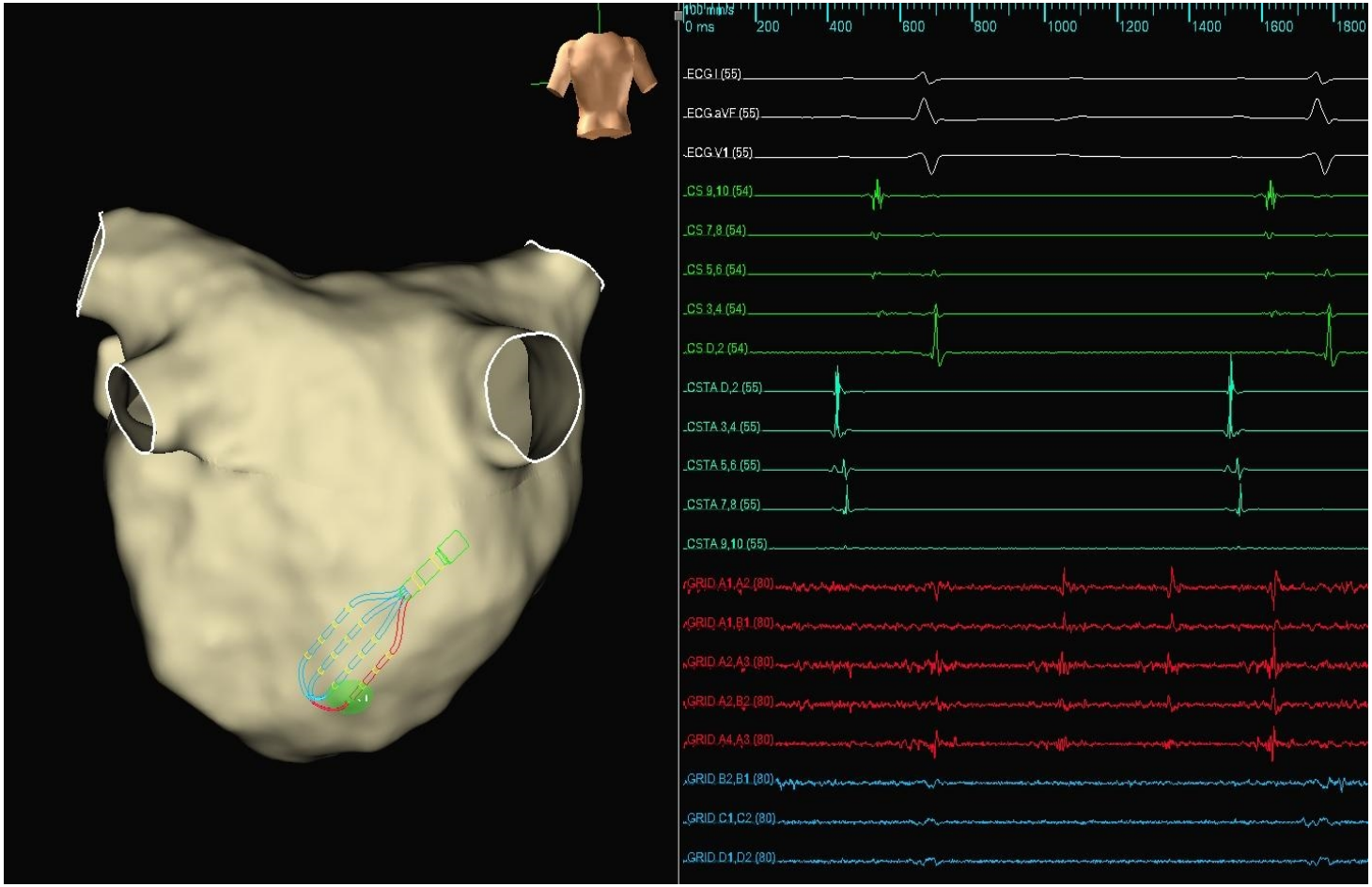
Butterfly lesion set-PW



LA posterior duvar izolasyonu



LA posterior duvar izolasyonu



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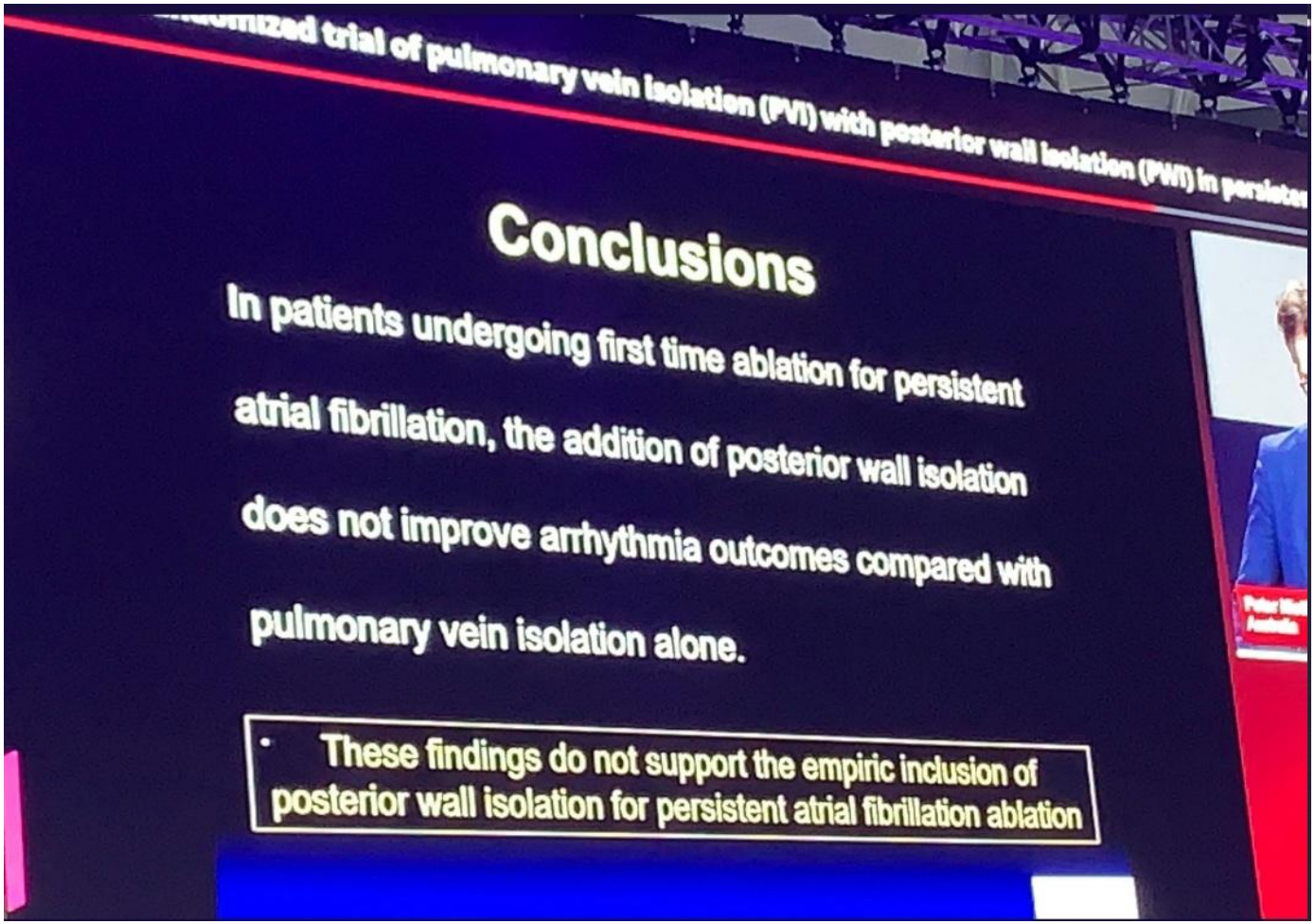
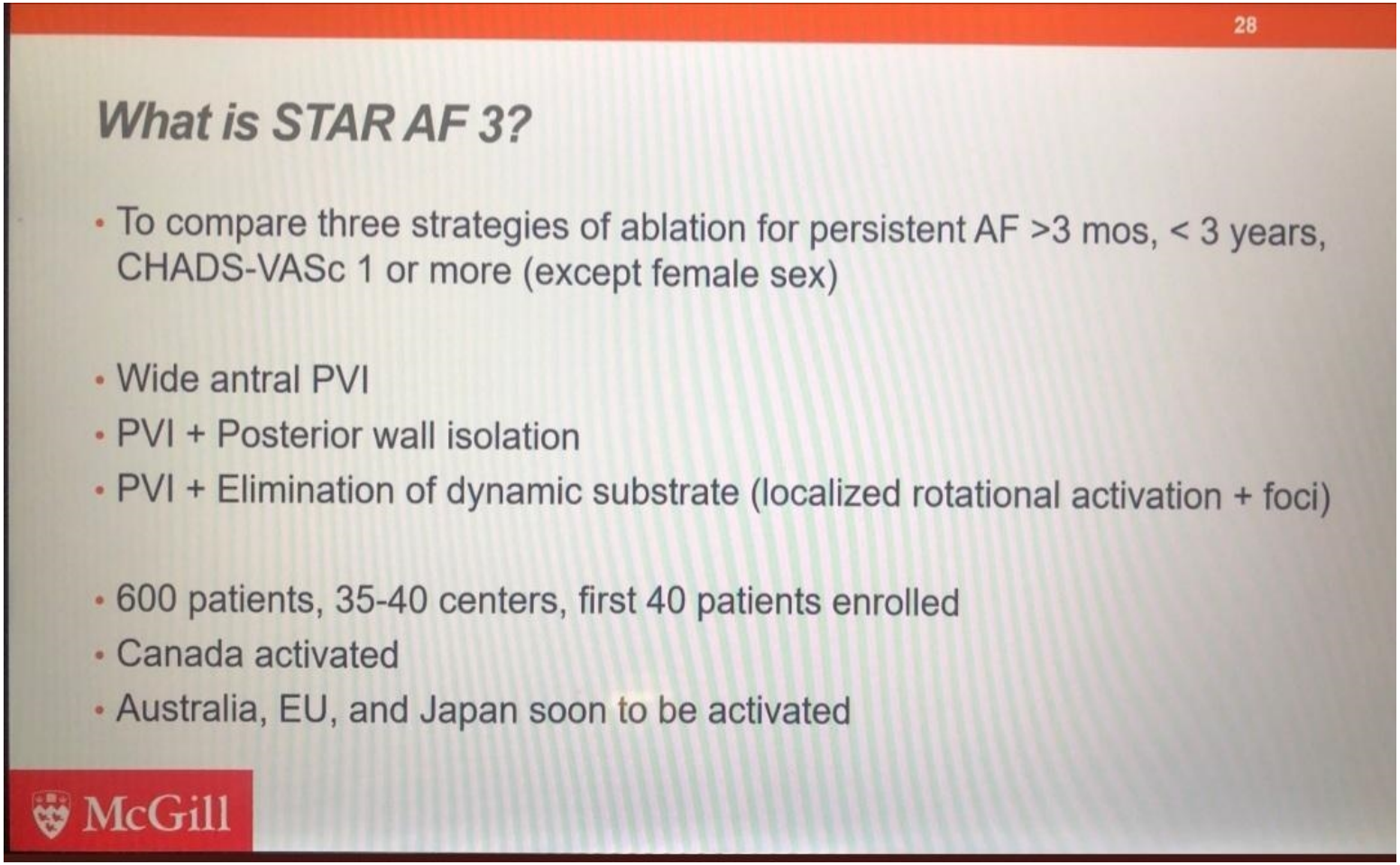
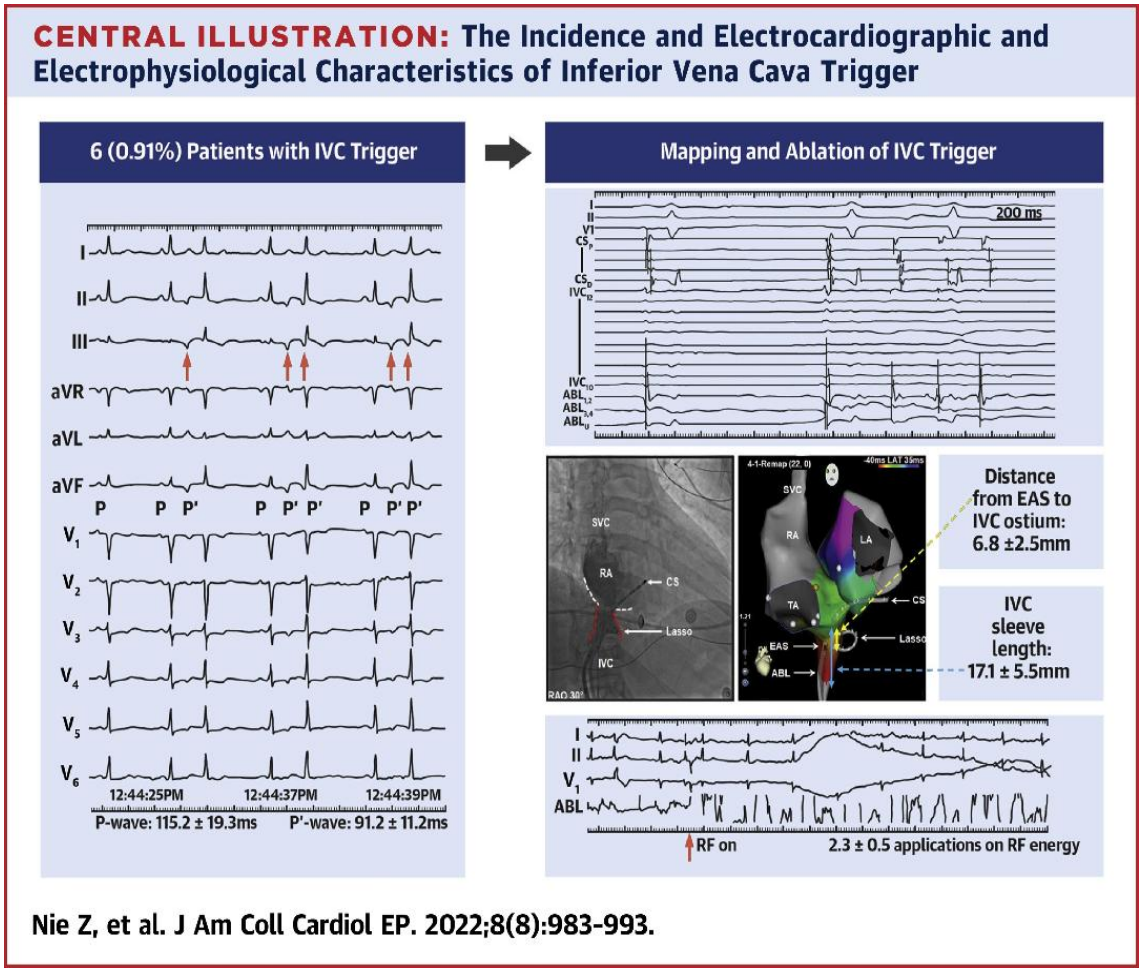


STAR AF-3


28
What is STAR AF 3?
• To compare three strategies of ablation for persistent AF >3 mos, < 3 years, CHADS-VASc 1 or more (except female sex)
• Wide antral PVI
• PVI + Posterior wall isolation
• PVI + Elimination of dynamic substrate (localized rotational activation + foci)
• 600 patients, 35-40 centers, first 40 patients enrolled
• Canada activated
• Australia, EU, and Japan soon to be activated
McGill

IVC



- Nadir non PV trigger
- PAF hastasında sıklık %0.9
- Inf der. negatif P dalgası
- Ön veya septal IVC

Cuttoff value of LVA NSR-AF

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Validating Left Atrial Low Voltage Areas During Atrial Fibrillation and Atrial Flutter Using Multielectrode Automated Electroanatomic Mapping

RESULTS A total of 2,002 paired-points were obtained. A cutoff of 0.35 mV in AFL predicted a sinus voltage of 0.5 mV (95% confidence interval [CI]: 0.12 to 2.02) and of 0.24 mV in AF (95% CI: 0.11 to 2.18; specificity [SP]: 0.94 and 0.96; sensitivity [SE]: 0.85 and 0.75, respectively). When generalized additive models were used, a cutoff of 0.38 mV was used for AFL for predicting a minimum value of 0.5 mV in SR (95% CI: 0.5 to 1.6; SP: 0.94, SE: 0.88) and of 0.31 mV for AF (95% CI: 0.5 to 1.2; SP: 0.95, SE: 0.82). With regard to AF maps, there was no change in the classification of any left atrial region other than the roof.

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Optimal cutoff value of bipolar low-voltage in electroanatomic voltage mapping during atrial fibrillation rhythm

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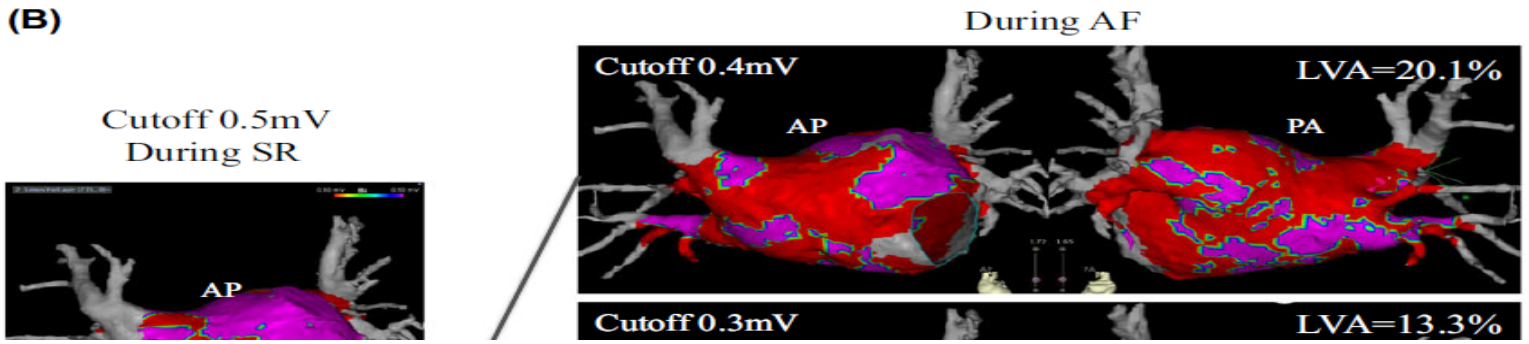
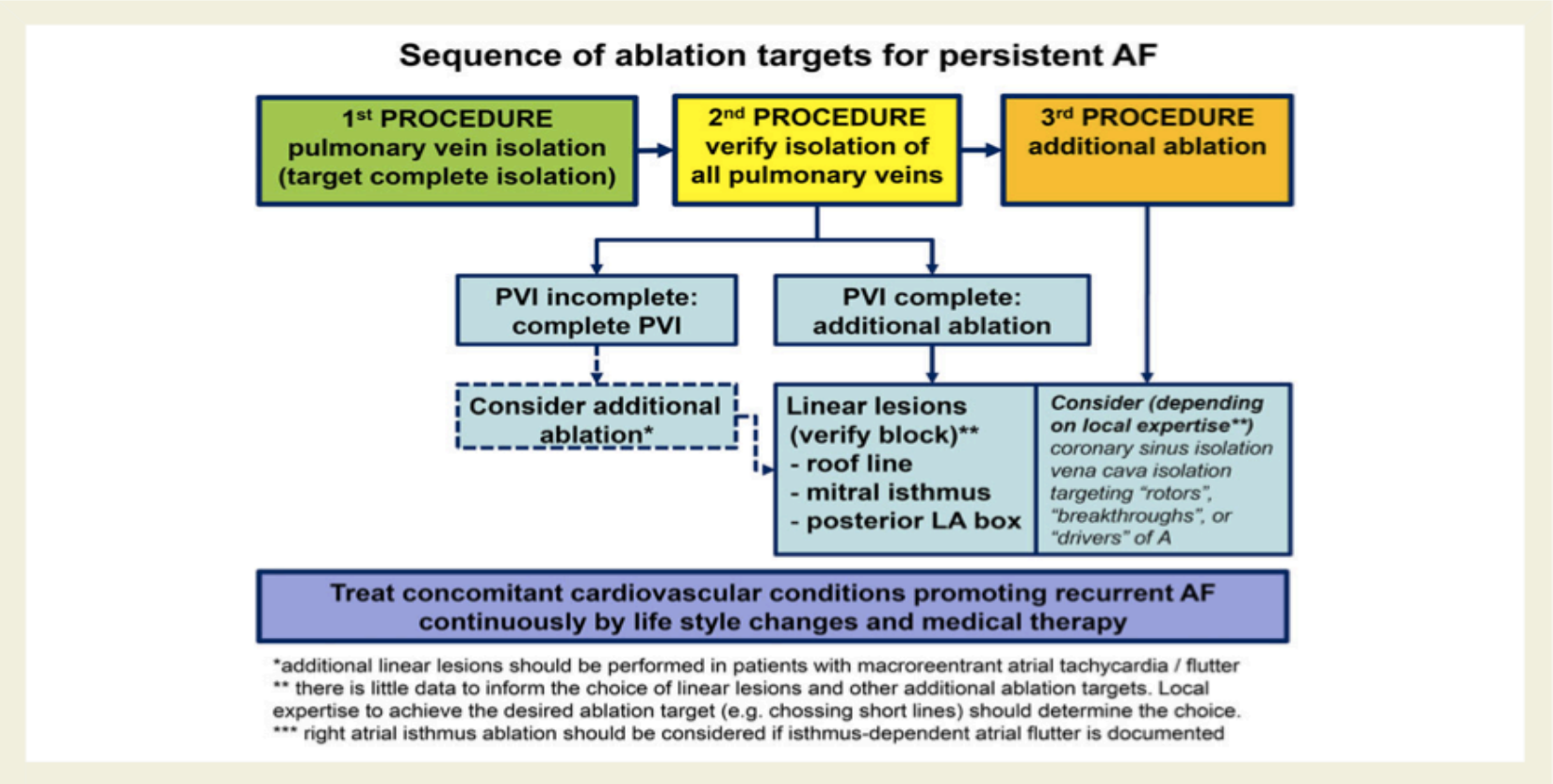


6 | CONCLUSION

EAVM during AF rhythm was feasible and there was a good correlation between LVAs during SR and AF rhythm with the optimal cutoff value of 0.2 mV. However, the evidence is restricted to patients with a relatively small LVA and we need further study to validate the feasibility of EAVM during AF rhythm in more degenerated LA with large LVA.

Persistent AF yaklaşım



Kirchhof P, Calkins H. Catheter ablation in patients with persistent atrial fibrillation. Eur.Heart J. 2017 Jan1;38(1):20-26

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