



12. Atrial Fibrilasyon Zirvesi 2023

8-9 Aralık 2023

Nirvana Cosmopolitan Kongre Merkezi, Antalya

Tipik Atrial Flatter Ablasyon Yöntemleri

Dr. Ata KIRILMAZ

Atrial Aritmiler 2

Oturum Başkanı: Bülent Görenek

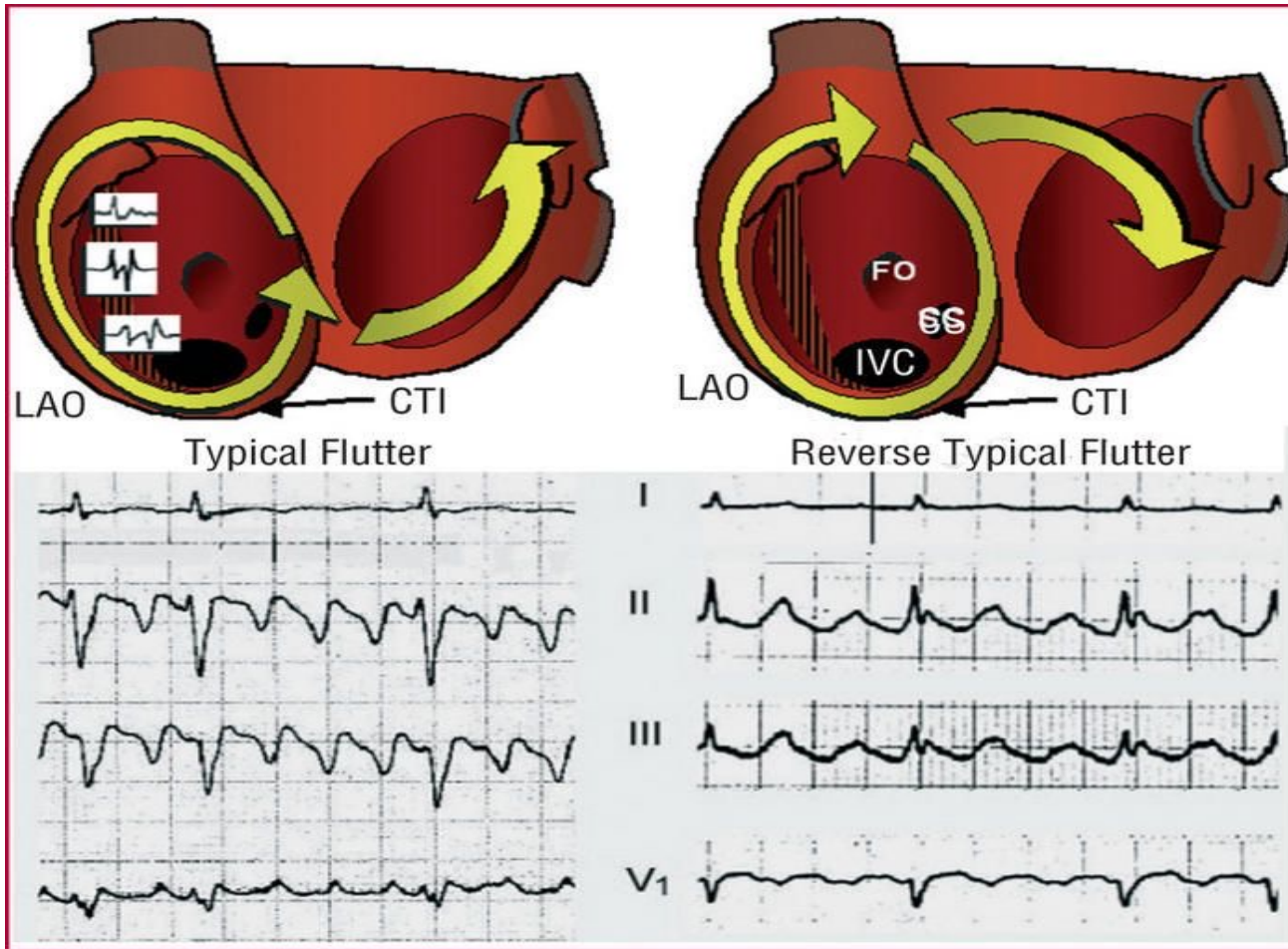
Tipik Atrial Flatter: Ablasyon Yöntemleri - **Ata Kırılmaz**

Tipik Atrial Flatter: Ablasyon Sonucunun Deđerlendirilmesi - **Kutay Vurgun**

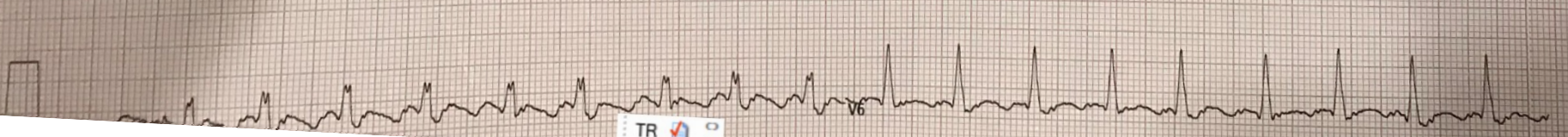
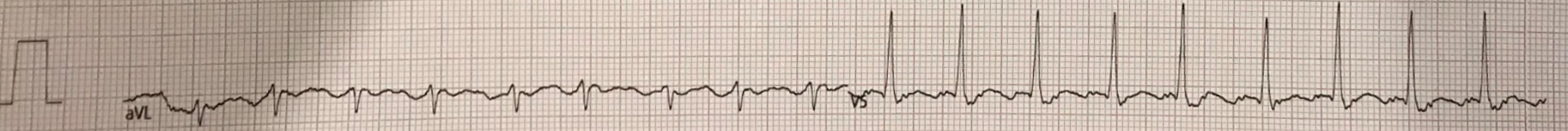
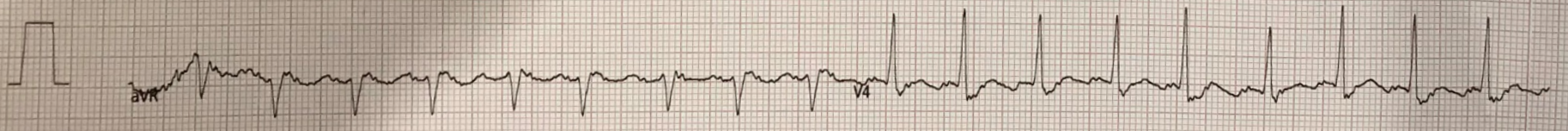
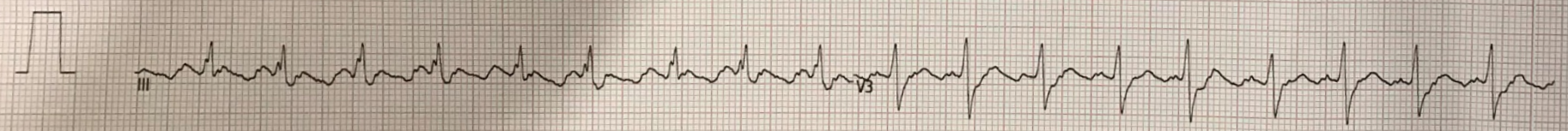
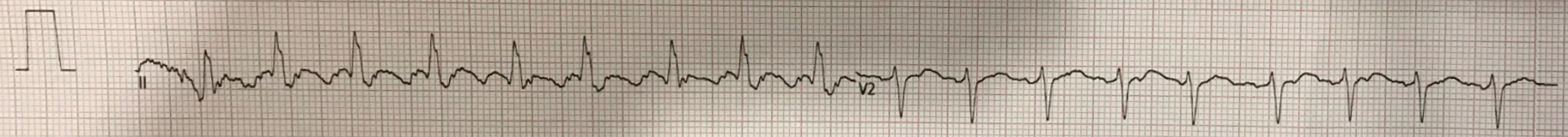
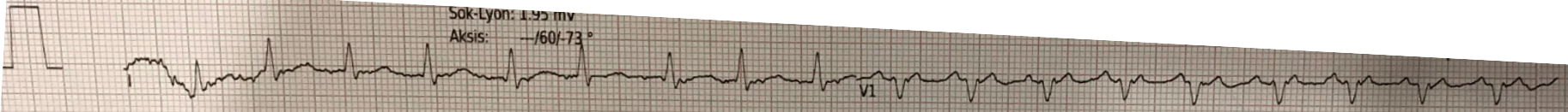
Tartışma

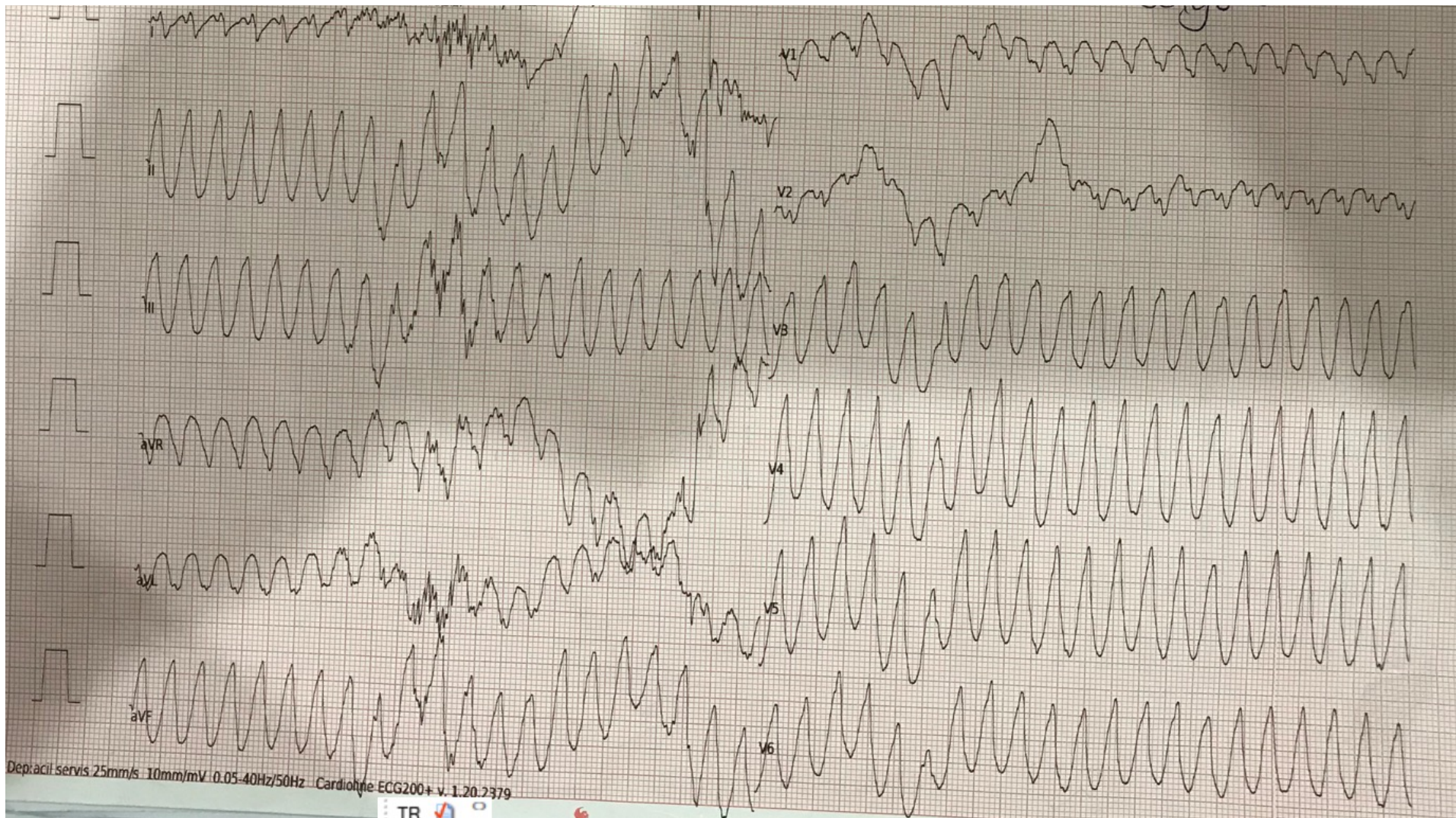
Saat yönünün tersi

Saat yönünde



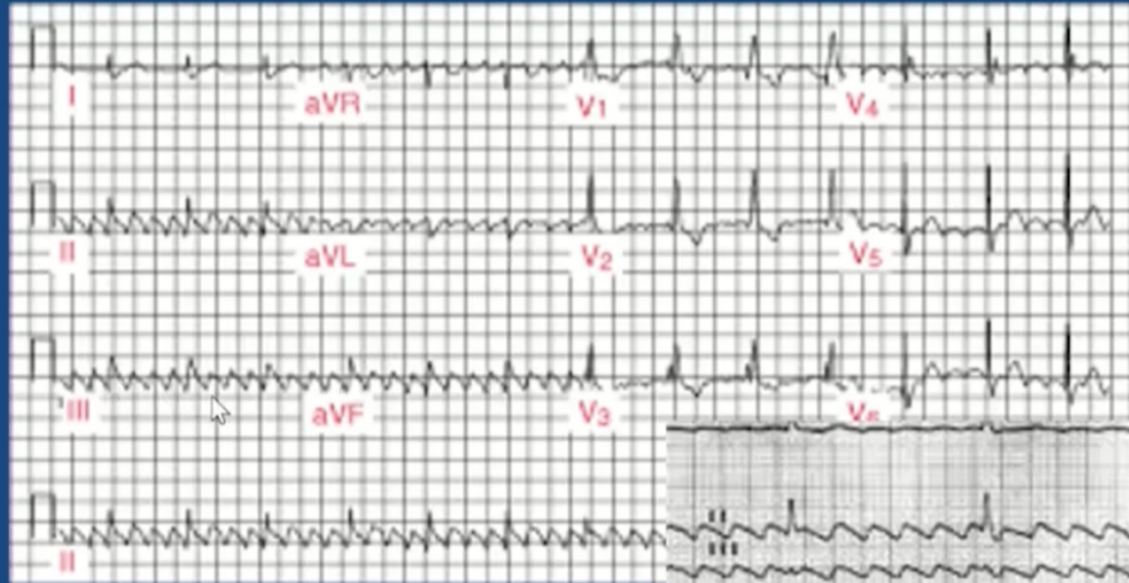
Sok-Lyon: 1.95 mv
Aksis: -60/73°

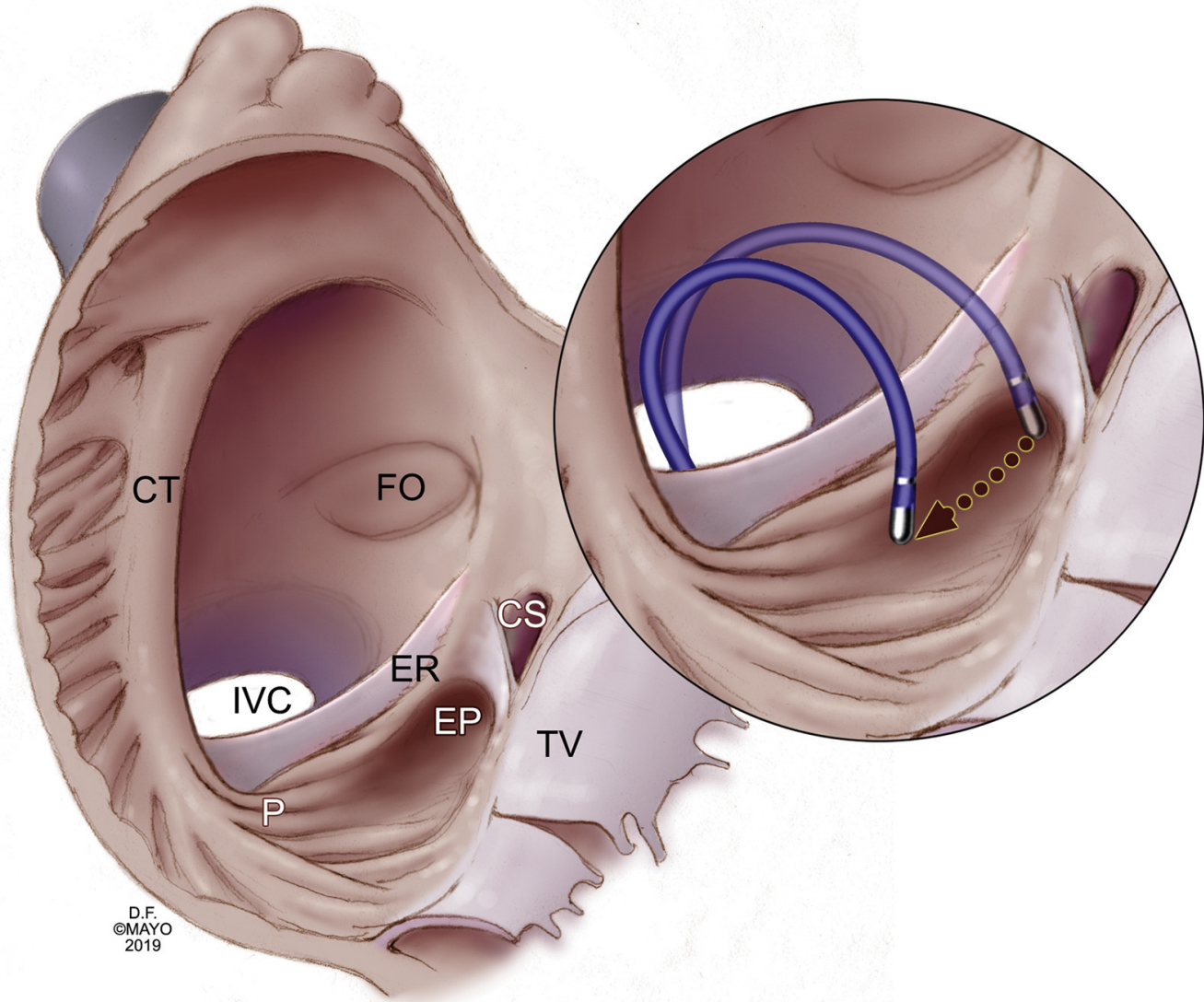




Dep: acil servis 25mm/s 10mm/mV 0.05-40Hz/50Hz Cardioline ECG200+ v. 1.20.2379

TR

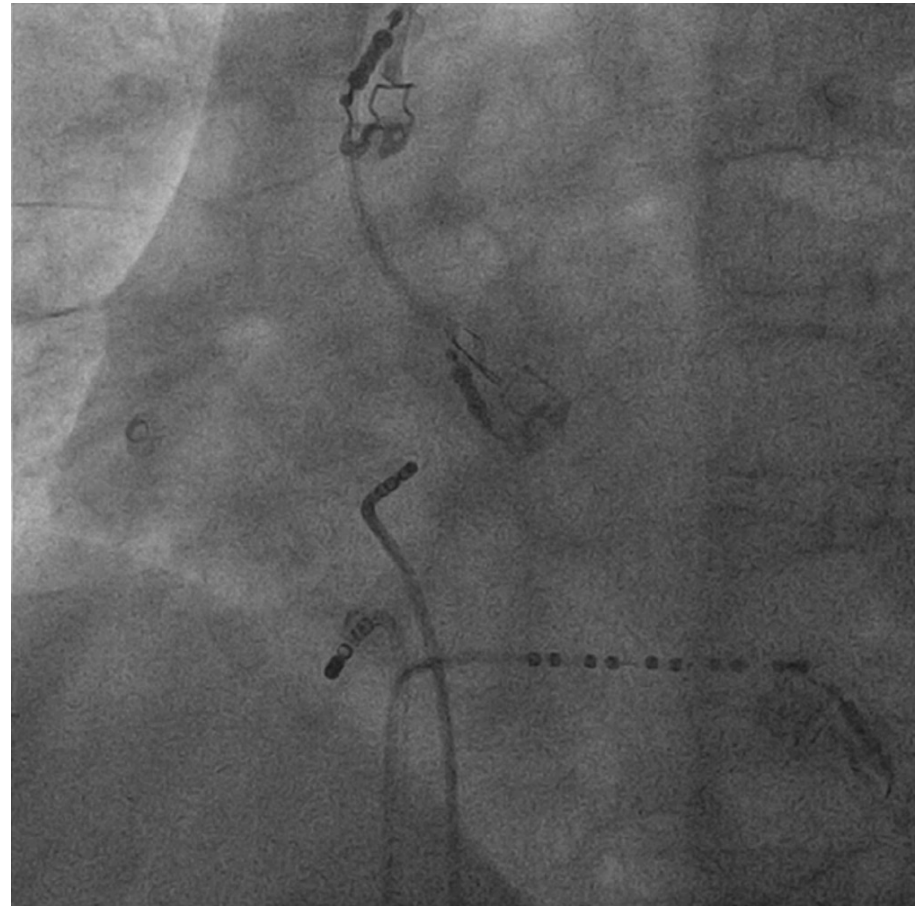
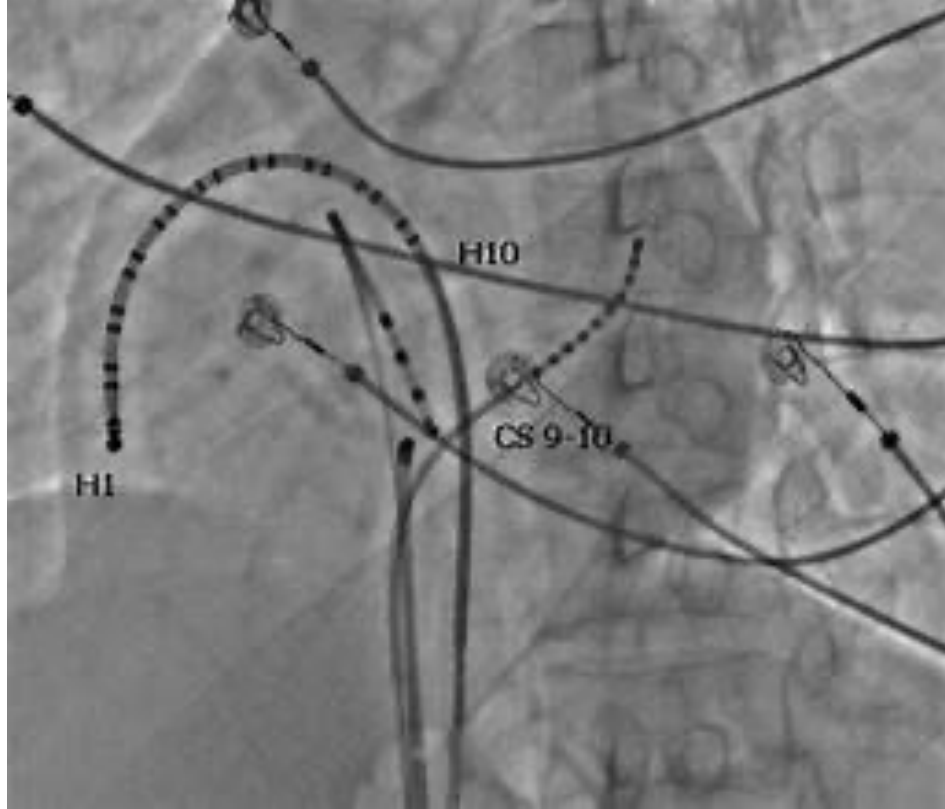


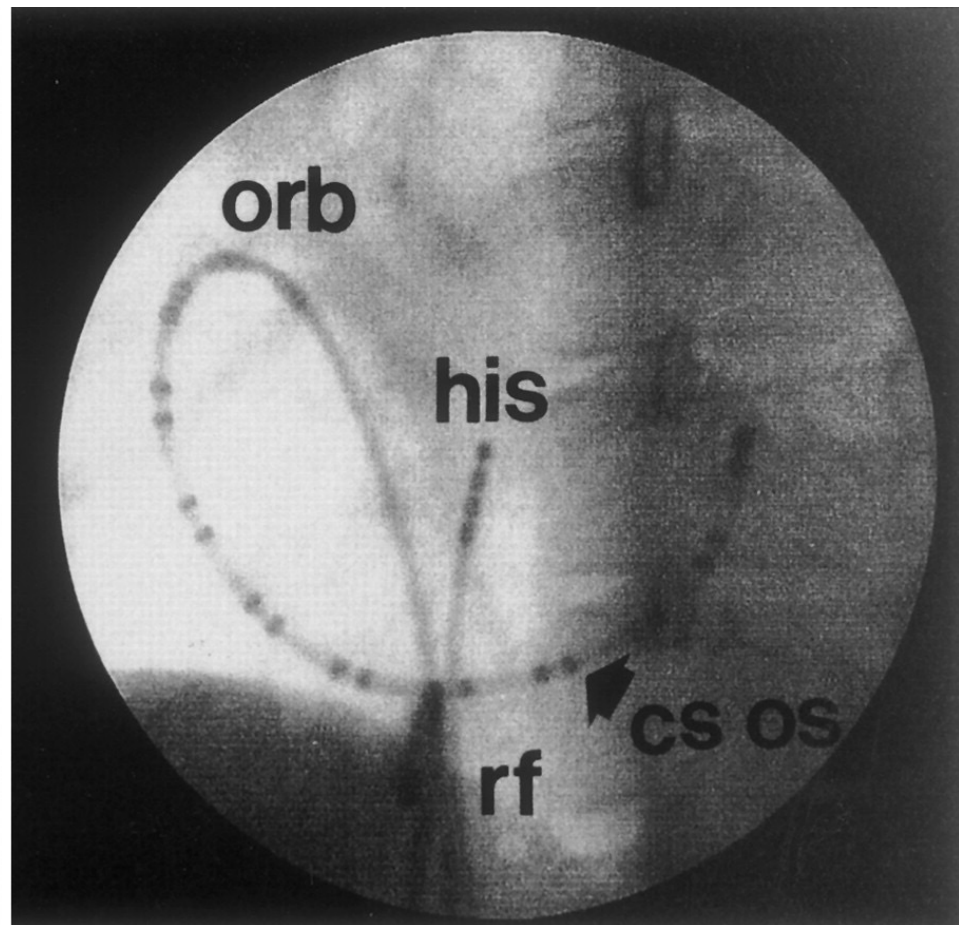
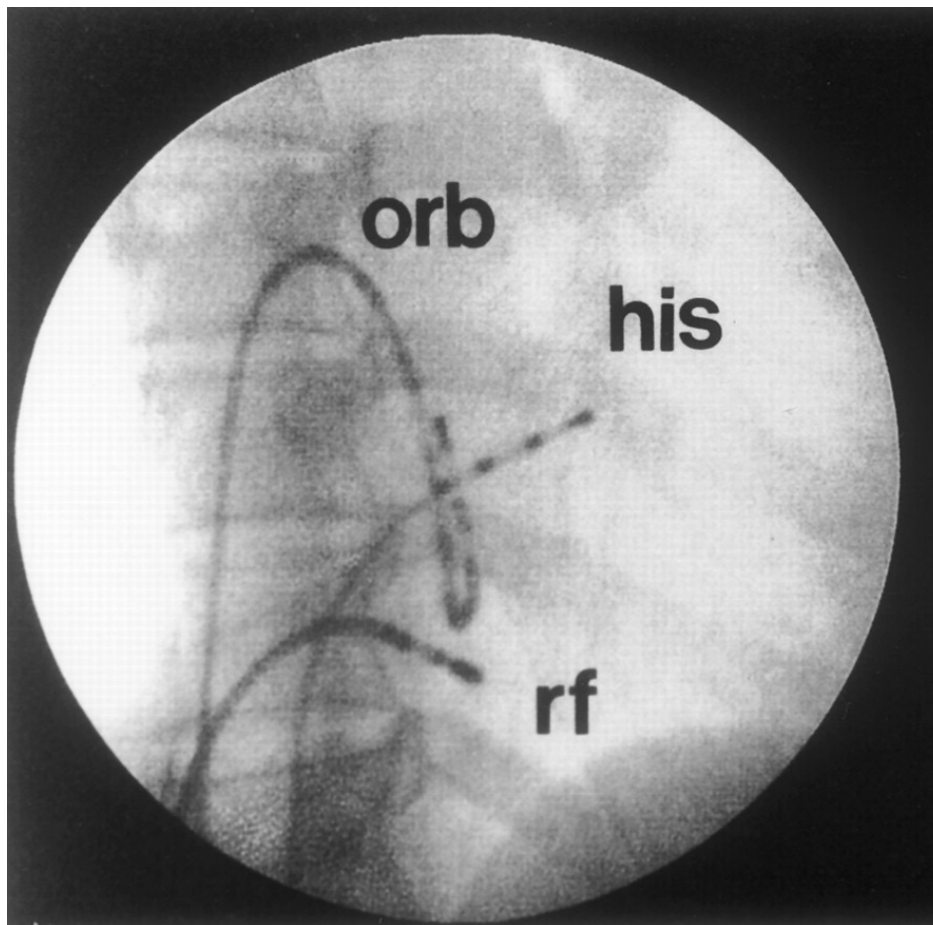


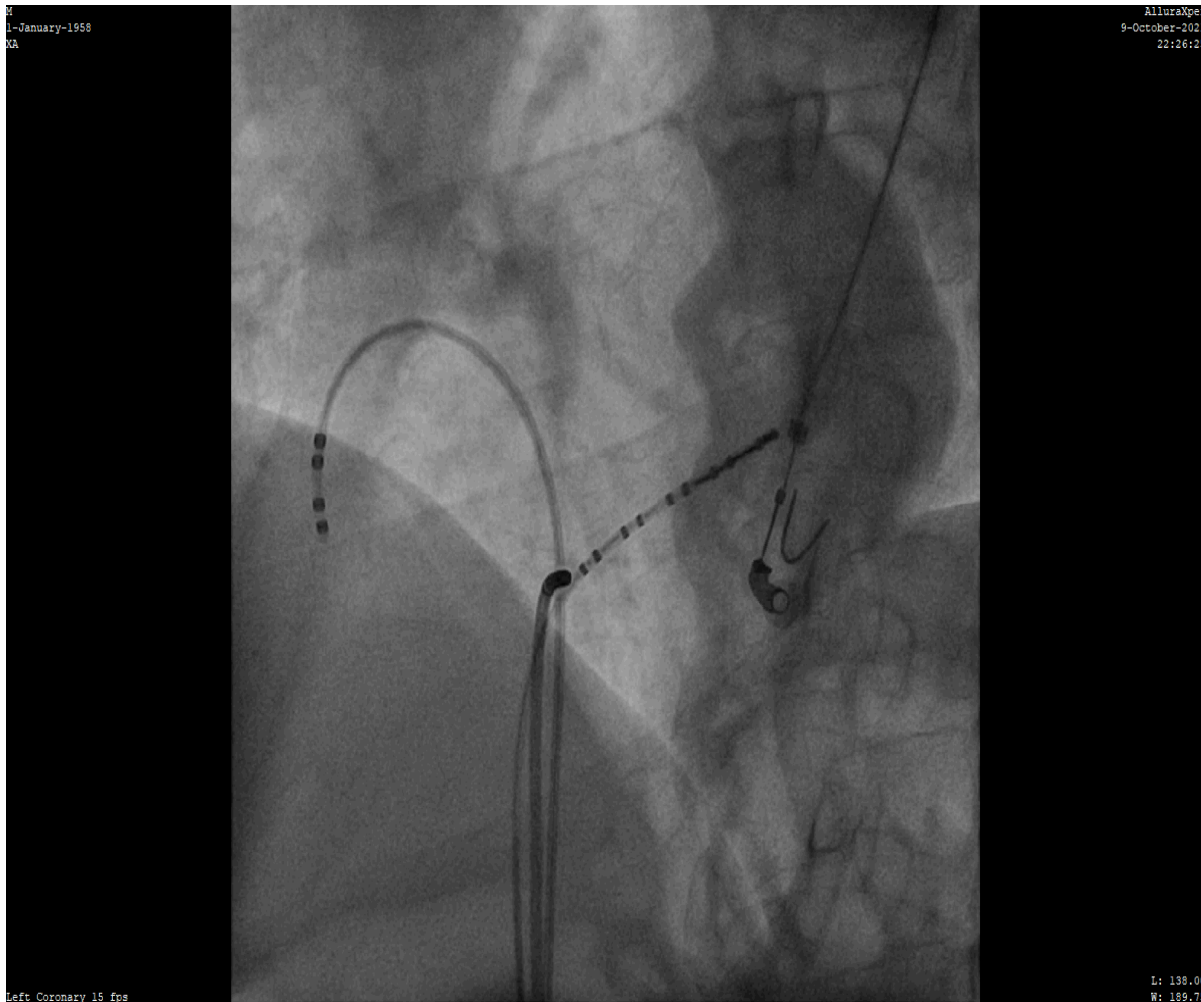
- Case Western Reserve University
Cleveland OH
- 1997-1998
- AFL ablasyon başarısı %60

- Konvansiyonel
- 4 mm TC RF ablasyon kateteri

LAO







- CS Os
- aşağı sağ atriyum
- istmus

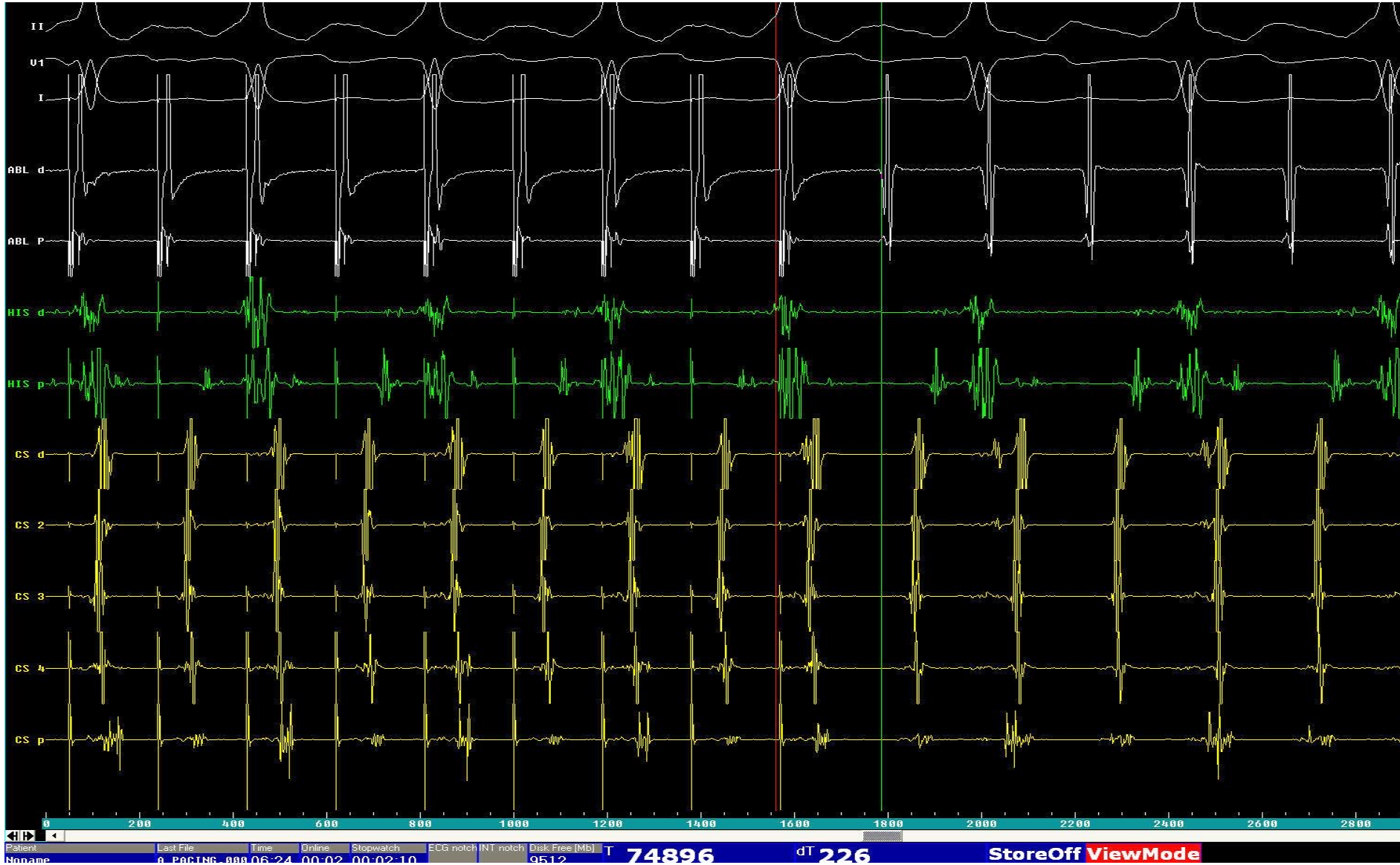
LAO

AFL RF ablasyonu

- Sinüs Ritmi
- Atriyal Flatter
 - DC CVN
 - AFL esnasında
- İşlem öncesi antikoagülan !

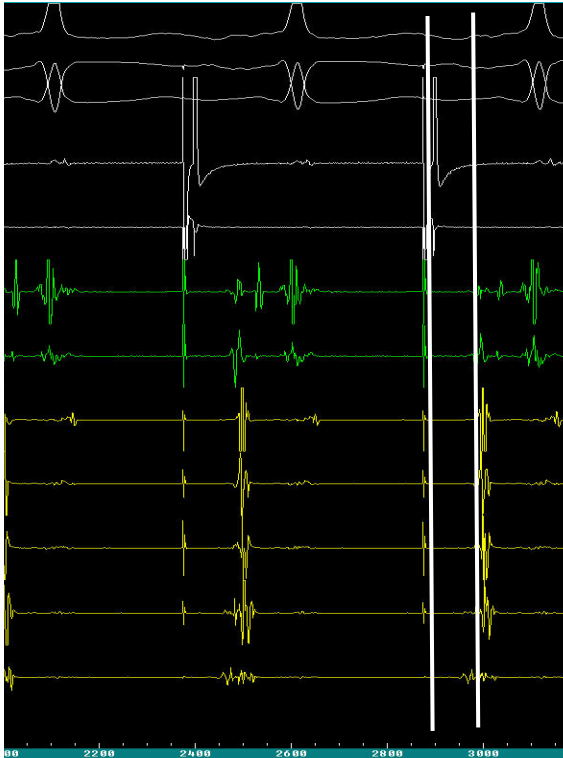
$$PPI = TCL$$

Postpacing interval = Taşikardi Siklüs Uzunluğu

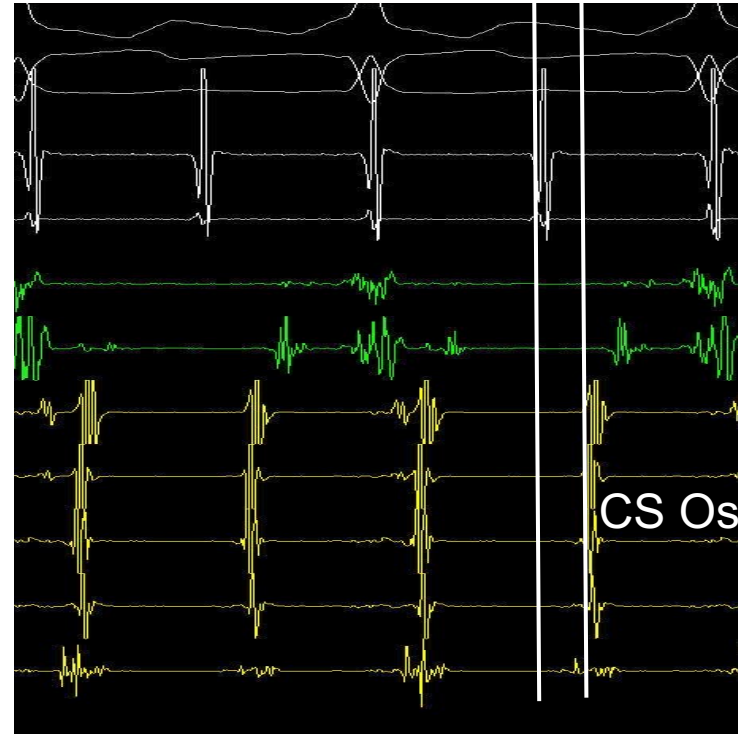


Bazal istmal geçiş süresi

- Sinüs Ritmi
 - CS OS pace
 - LRA pace



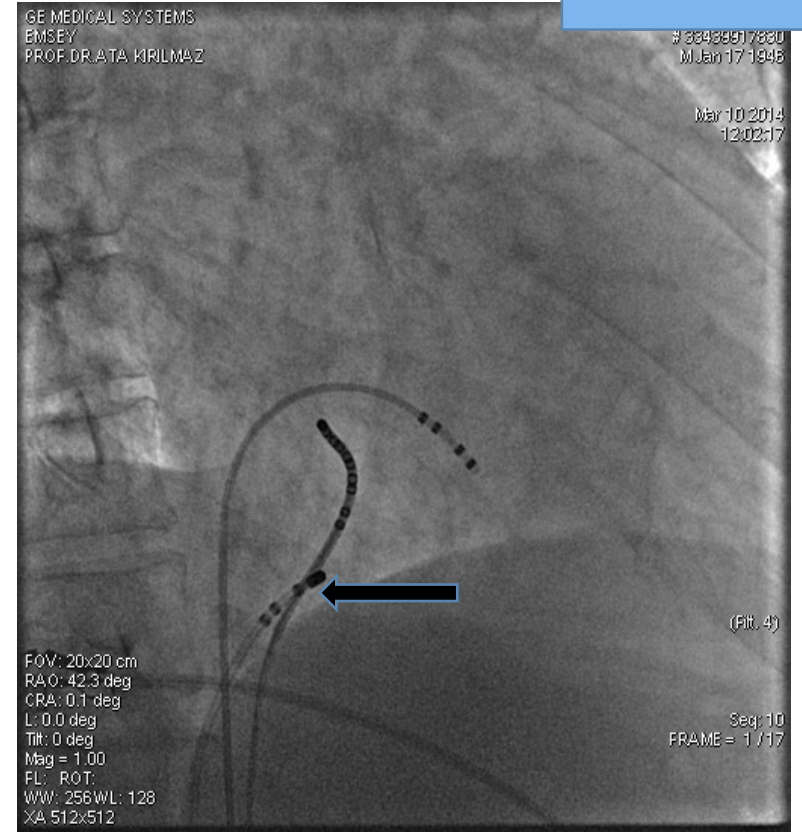
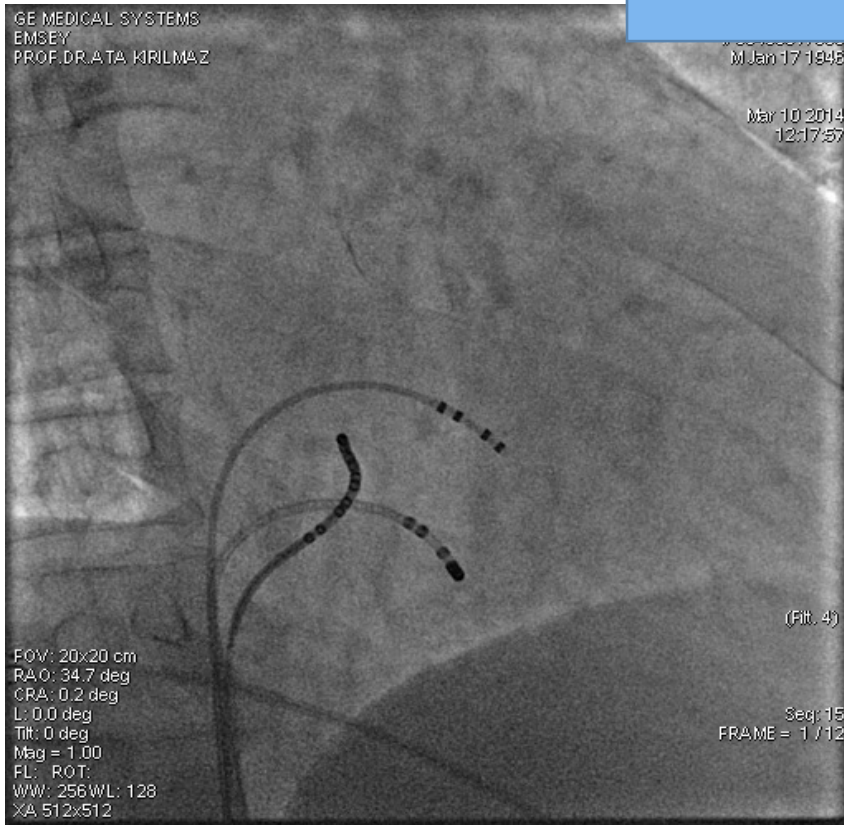
- Atrial Flutter
 - Flutter yönünde CS Os-LRA



Ablasyon kateteri/Anatomi

- Abl kateteri ventriküle ulaşmalı
- aV sinyal oranı
- RAO geri çekme
- LAO geri çekme lineer hat konumu

RAO geri çekme

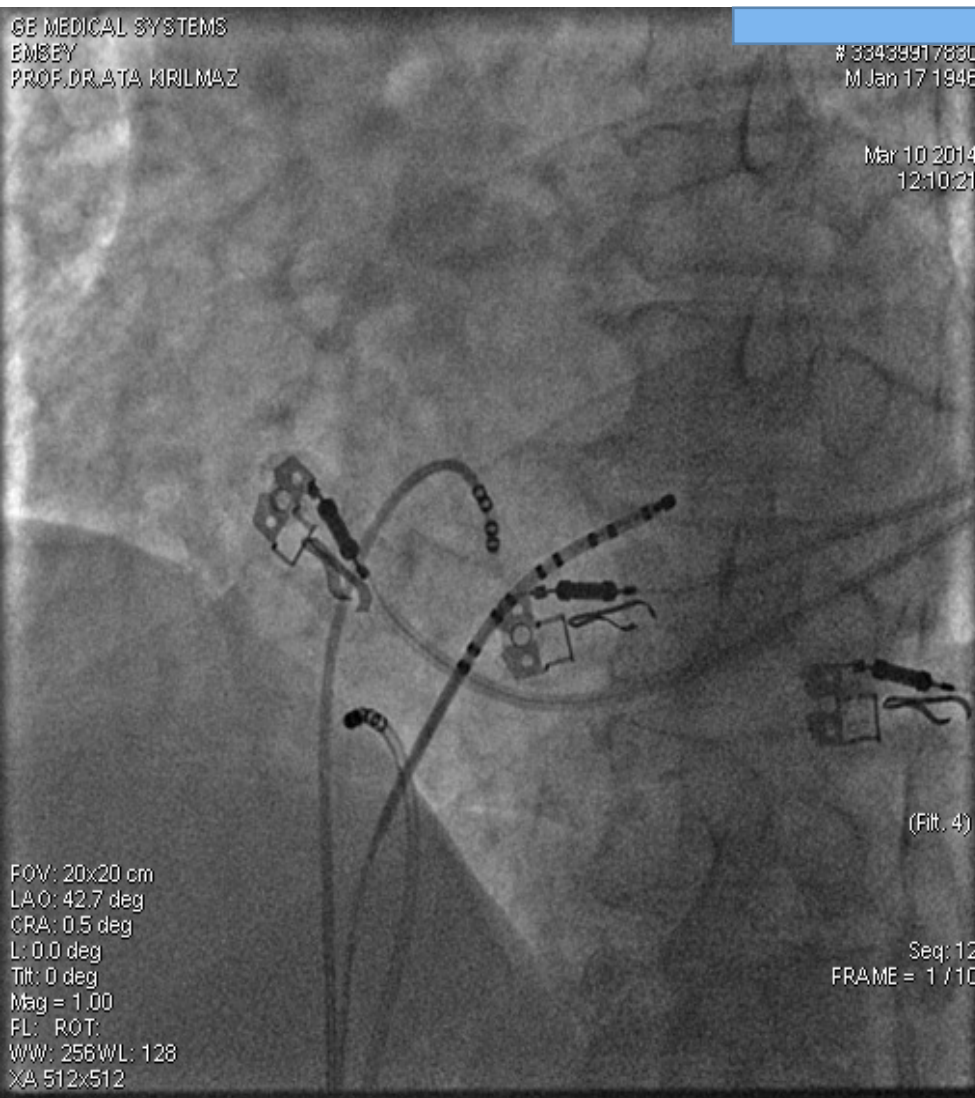


LAO geri çekme

GE MEDICAL SYSTEMS
EMSEY
PROF.DR.ATA KIRILMAZ

33439917830
M Jan 17 1946

Mar 10 2014
12:10:21



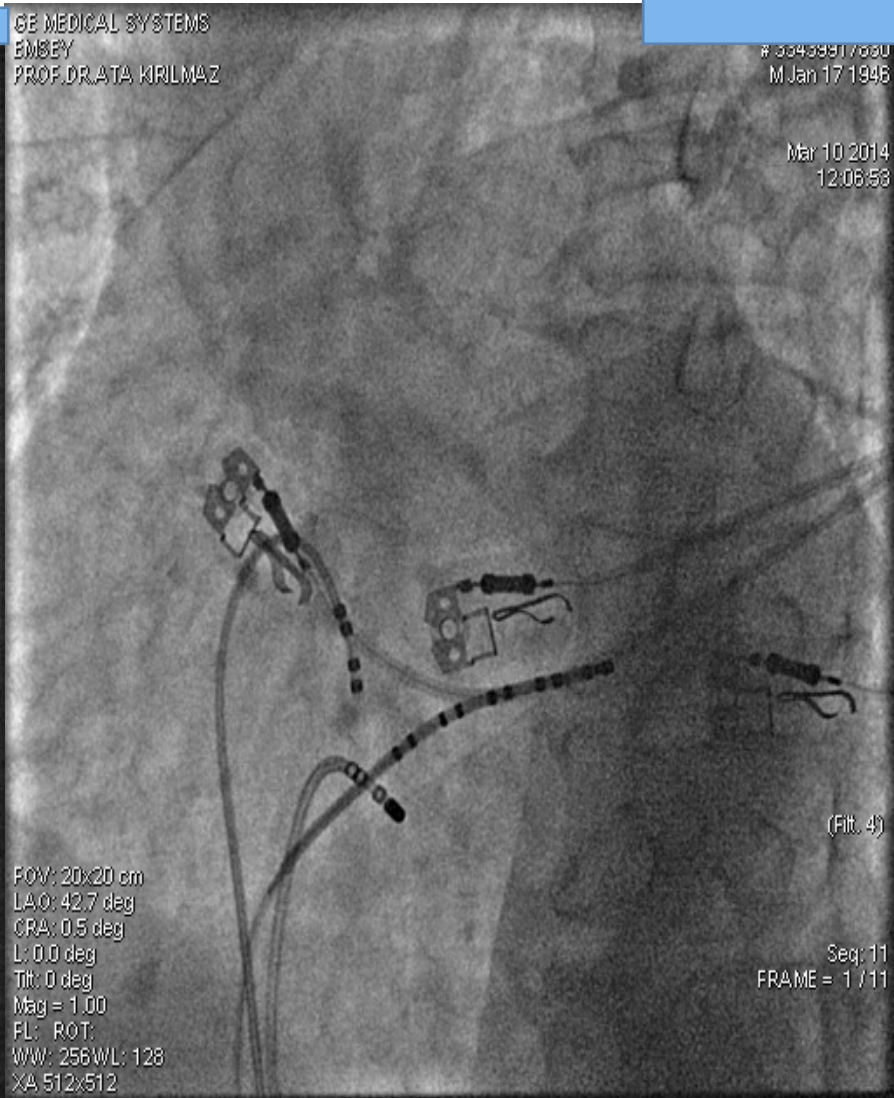
(Flt. 4)

Seq: 12
FRAME = 1 / 10

GE MEDICAL SYSTEMS
EMSEY
PROF.DR.ATA KIRILMAZ

33439917830
M Jan 17 1946

Mar 10 2014
12:08:53



(Flt. 4)

Seq: 11
FRAME = 1 / 11

Gerekirse

- kateter deęiřimi
- uzun destekleyici sheath
 - SAFL kateteri
 - Uzun sheath



Baęlantılı resim görüntülenemiyor. Dosya taşınmış, yeniden adlandırılmış veya silinmiş olabilir. Baęlantının doğru dosya ve konuma iş...



RF enerjisi ile oluşan lezyonu etkileyen faktörler

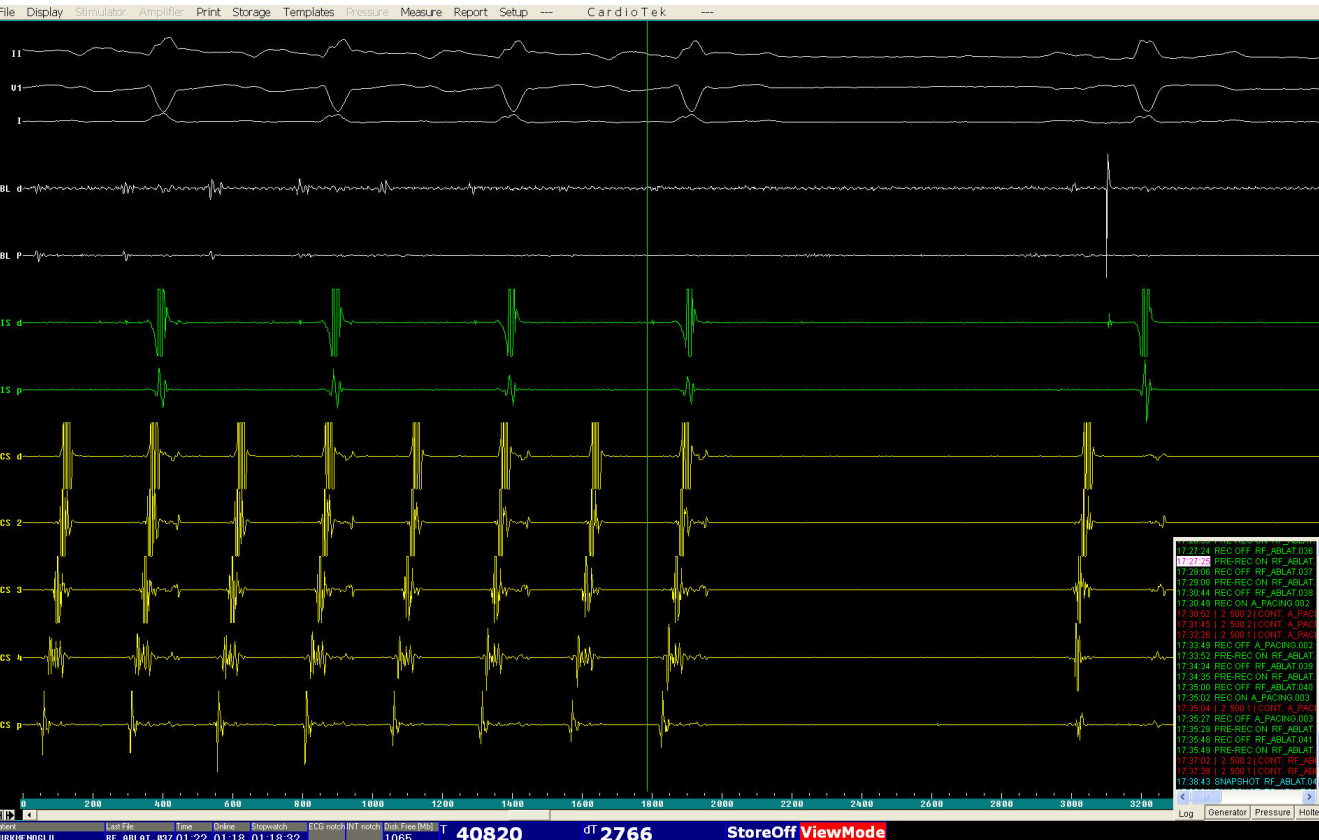
- Temas kuvveti
- Ulaşılan Isı
- Uygulanan güç (Watt)
- Süre
- Kan akımı
- Kateter ucunun oryantasyonu

RF uygulaması ile etkin lezyon göstergeleri

- Kateter ucunda gittikçe artan sıcaklık
- Lokal egm yüksekliğinde azalma
- Empedansta düşme
- Lokal blok oluşumunu gösteren split potansiyeller
- Lokal pace eşik değeri yükselmesi
- Ablasyon esnasında doku temasının yüksek olması

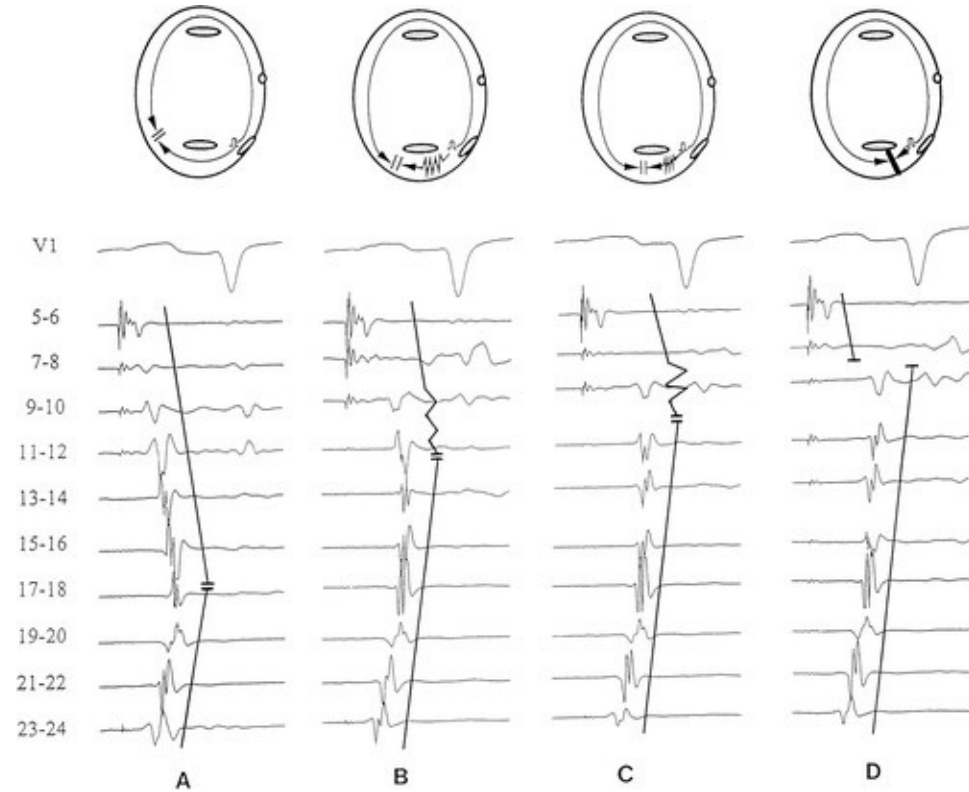
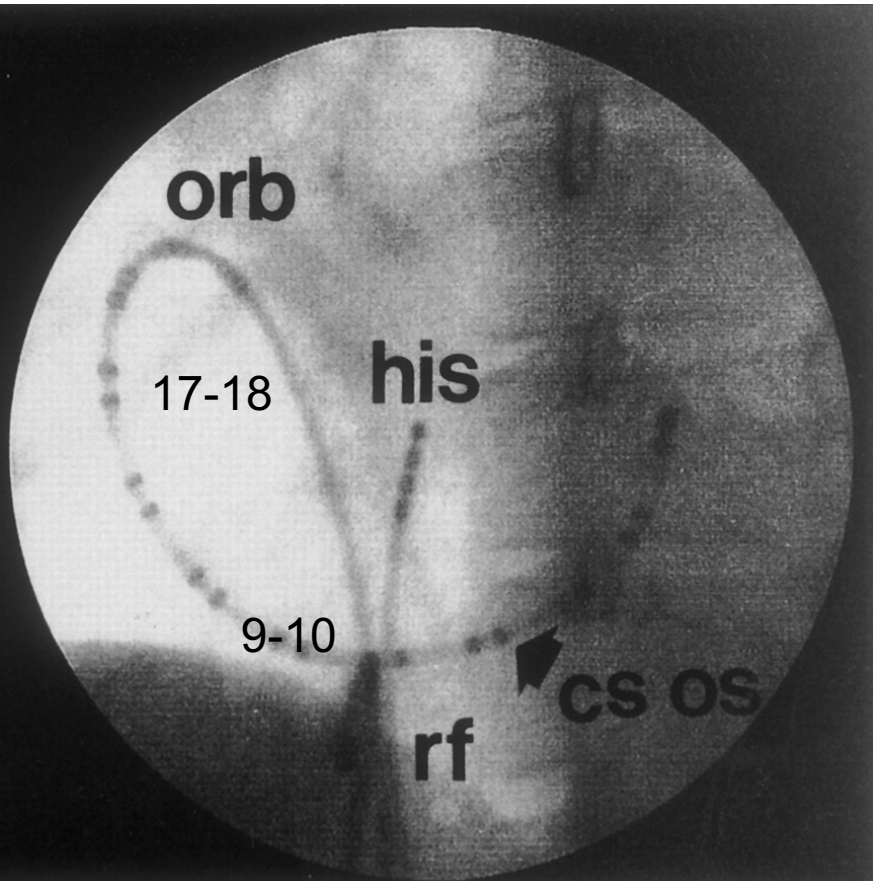
Atrial flutterde RF ablasyonu

- AFL sonlanması
- İstmal blok gösterilmesi



Sinüs ritminde AFL ablasyonu

- CS Os pace eşliğinde aktivasyon zinciri bloku desteklemeli



CS Os pace



RF esnasında ve CS Os pace sırasında

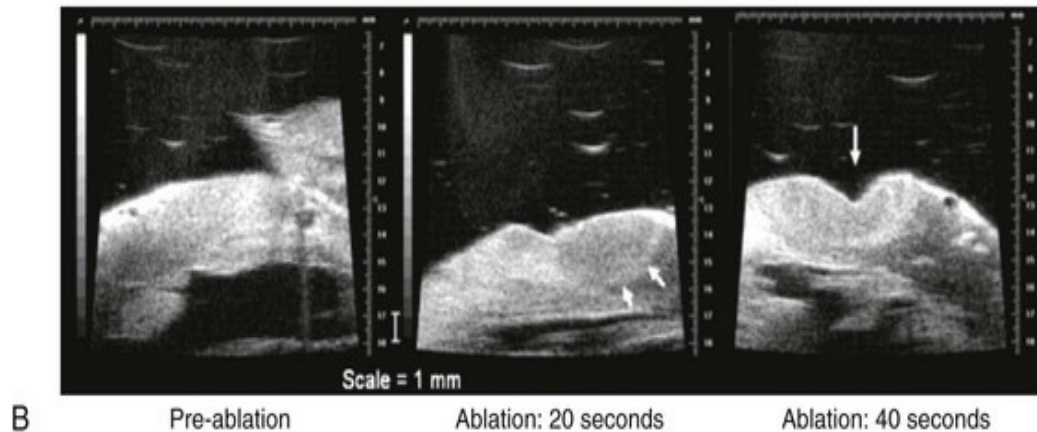
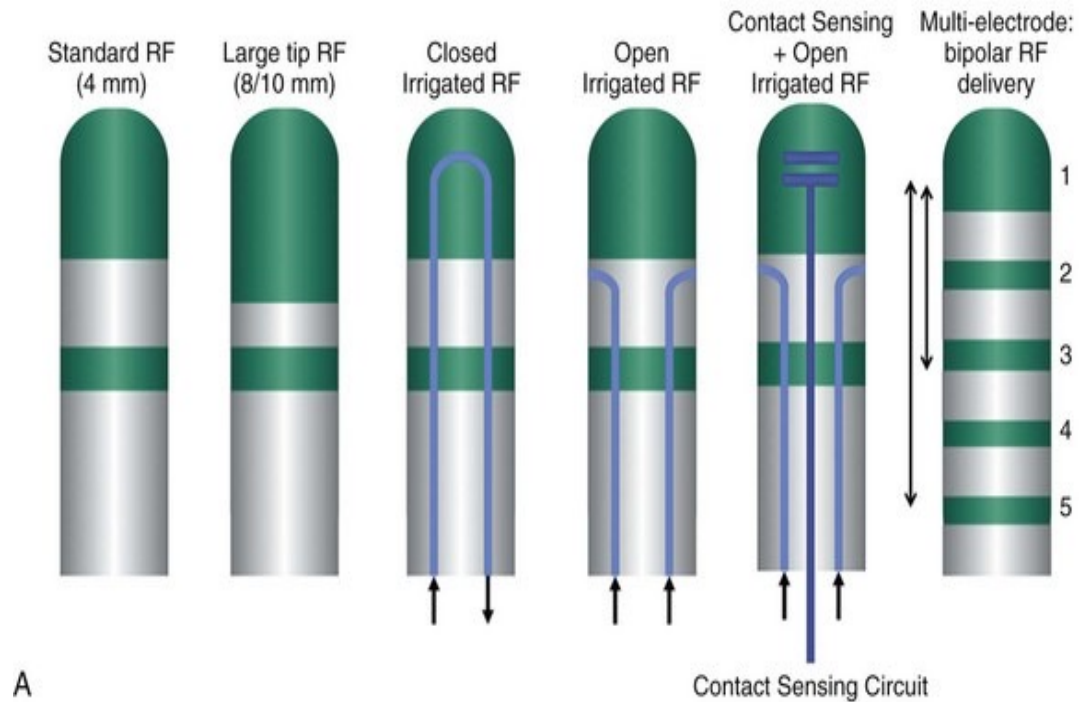


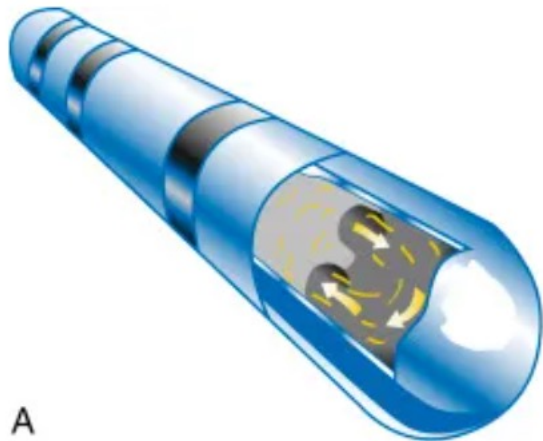
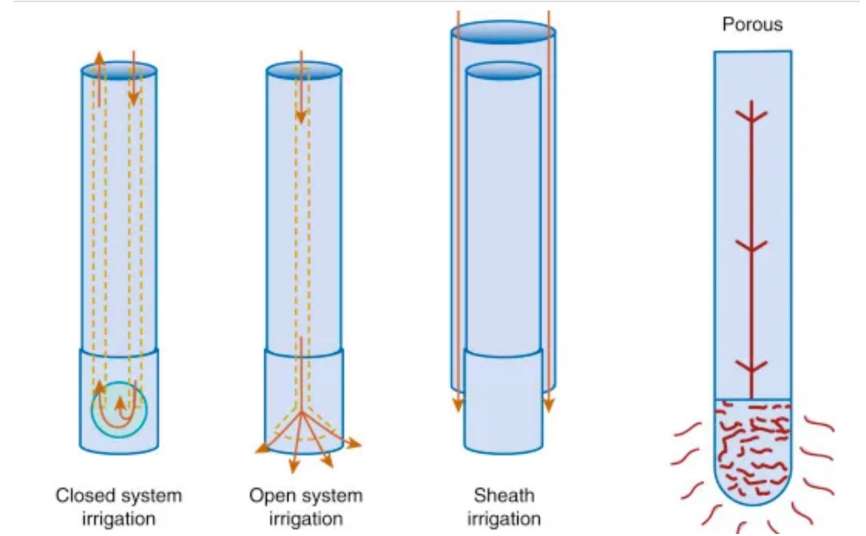
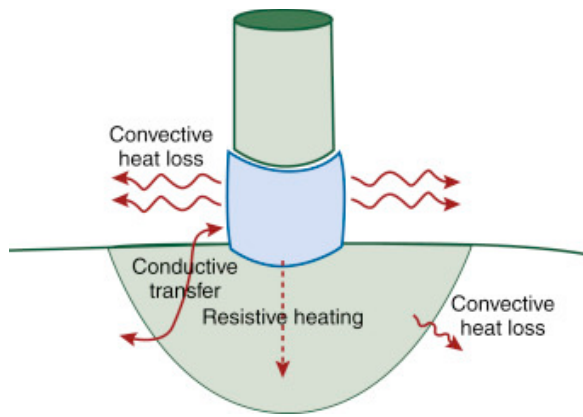
RF kateteri

iki taraflı sinyal
GAP aranması

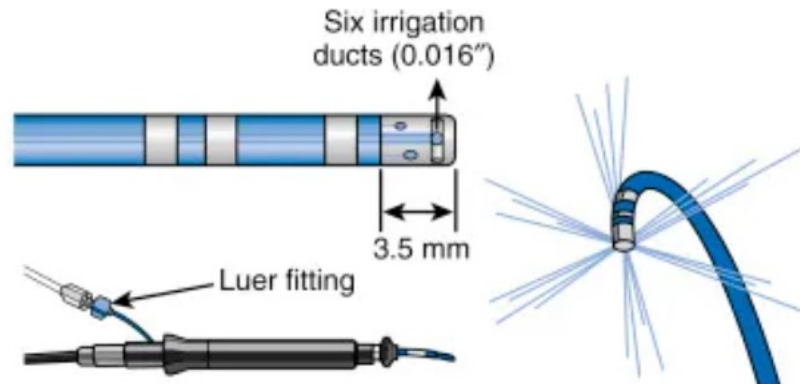


Kateter ablasyon teknikleri





A



B

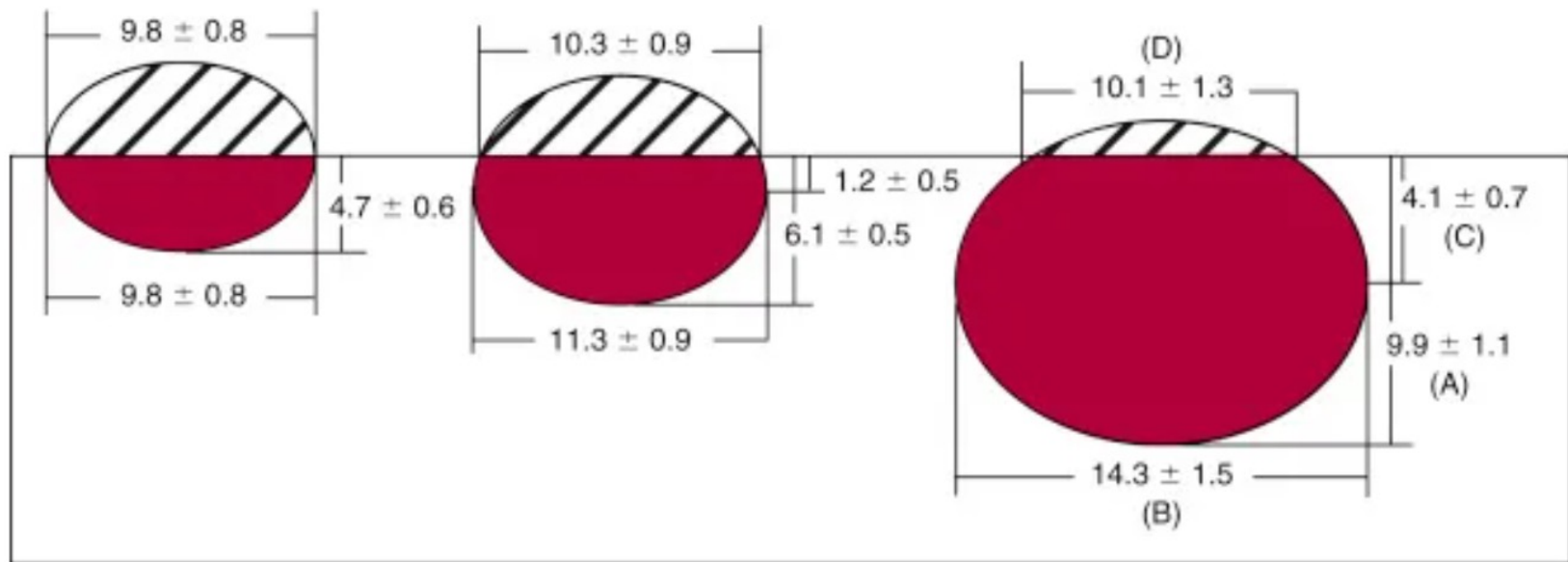
İrrigasyon kateteri ile oluşan lezyon büyüklüğü

RF Lesion Dimensions

Constant voltage
(66 V)

Temperature control
(80–90° C)

Constant voltage (66 V)
with irrigation



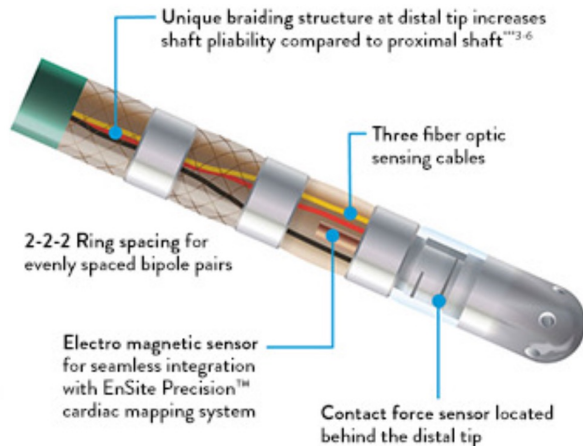
Lesion volume:
135 ± 33 mm³

275 ± 55 mm³

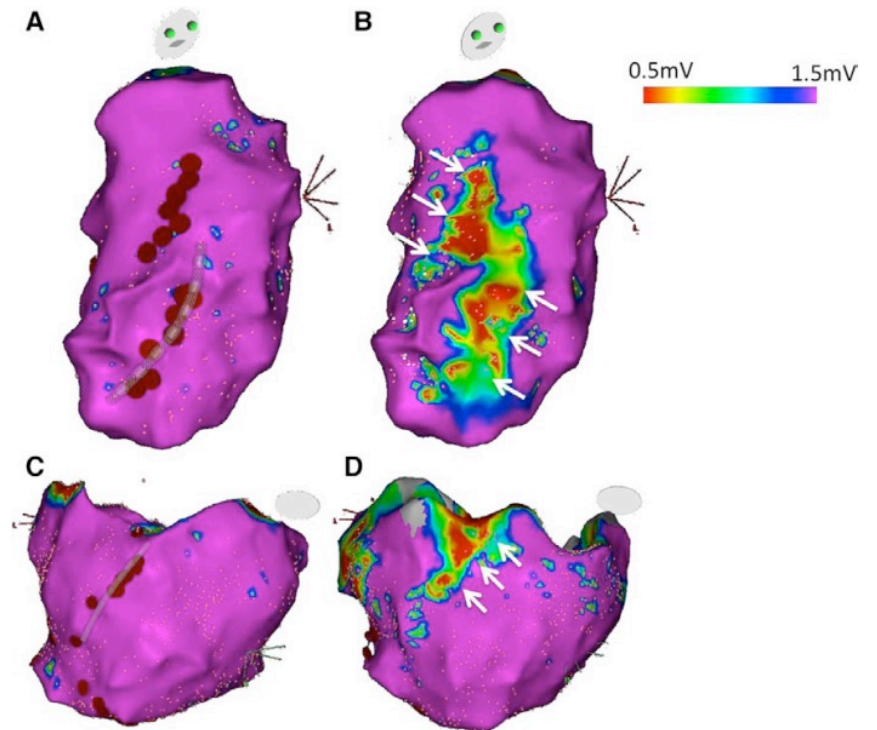
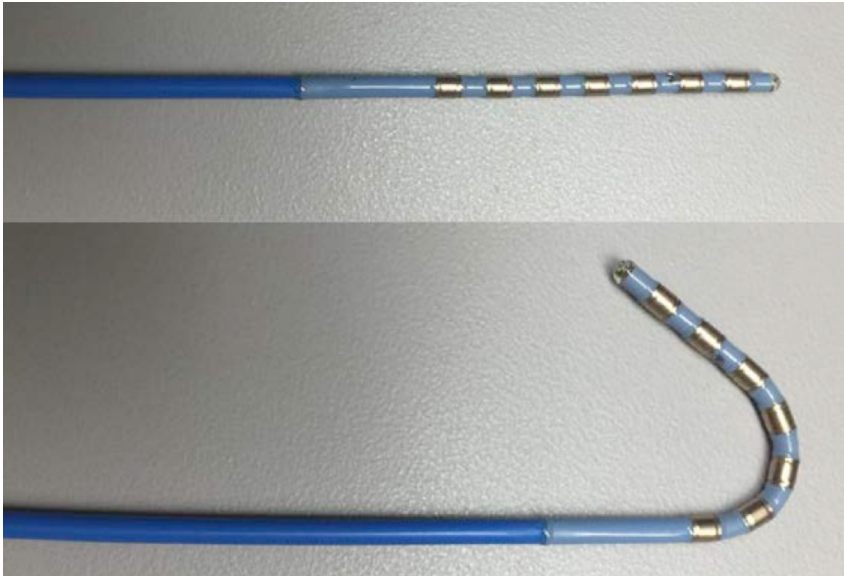
700 ± 217 mm³

Bası derecesi

- TactiCath Contact Force Ablation Catheter, Sensor Enabled
- 0.3 gram hassasiyet
- THERMOCOOL SMARTTOUCH® SF Catheter



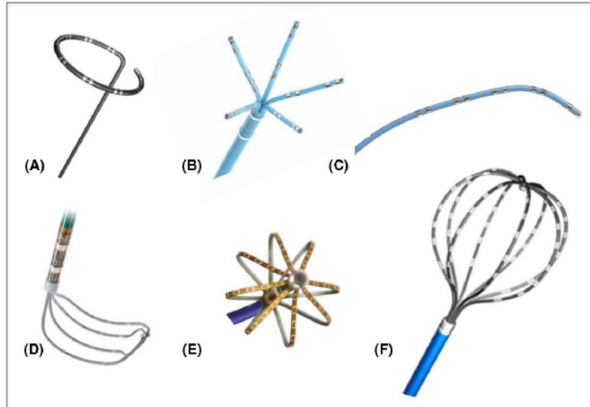
nMARQ linear ablation kateteri



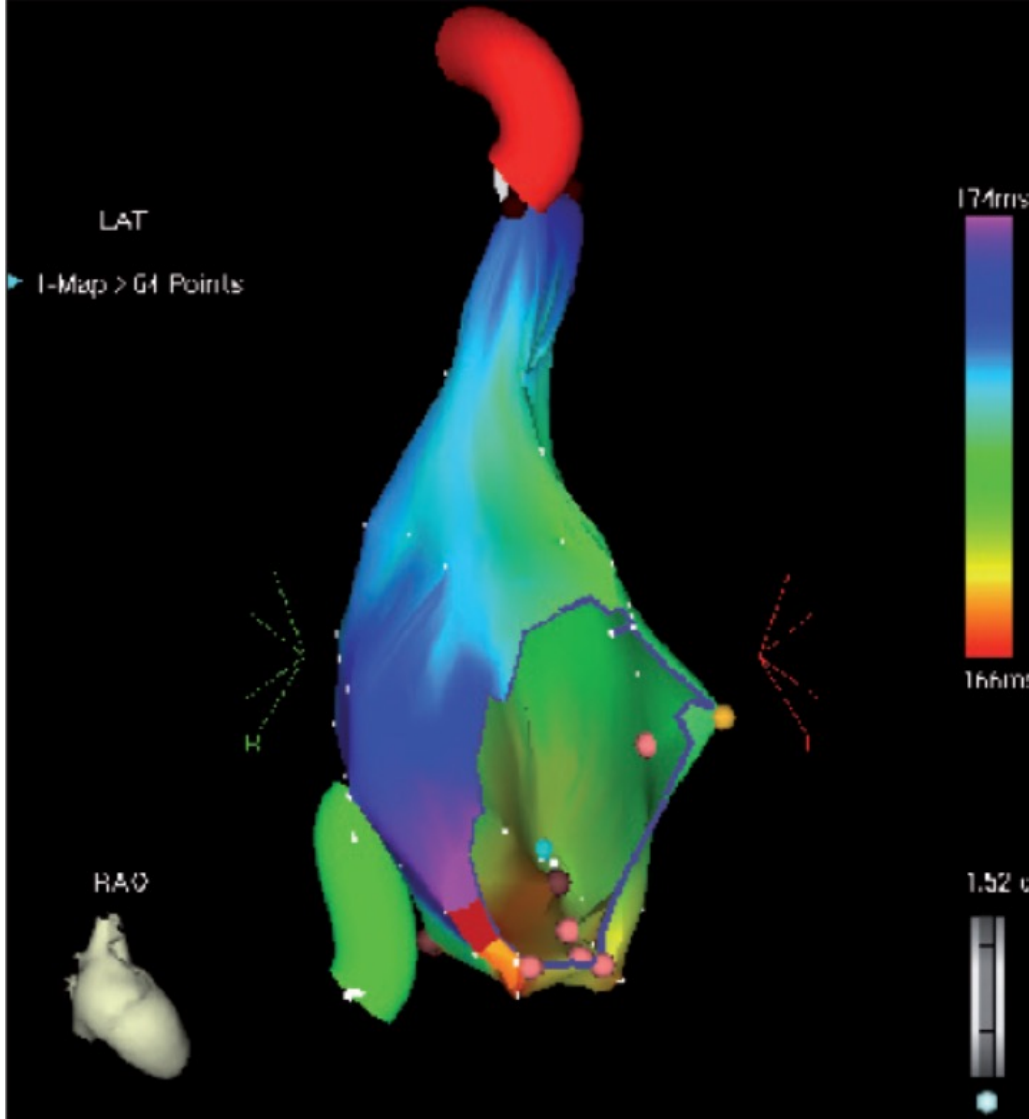
(Biosense-Webster, Diamond Bar, CA)

3 Boyutlu Haritalama Sistemleri

- Manyetik ve akım bazlı lokalizasyon tespiti
- CARTO 3
- EnSite
- Rhythmia
- Aktivasyon haritalama
- Lokal aktivasyon zamanı
- Kayıt alınan noktanın lokalizasyonu
- X-Ray yok

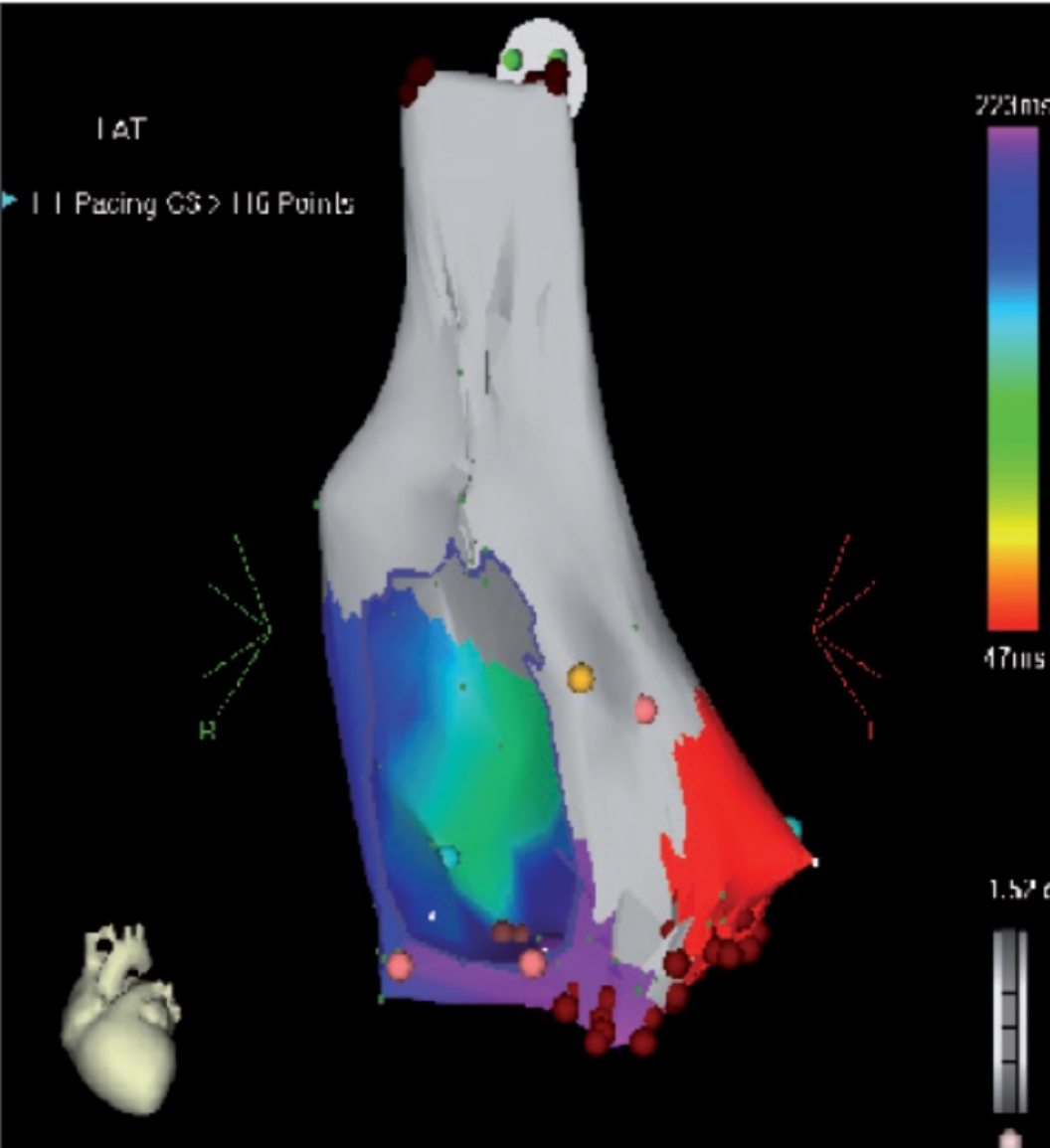


3 Boyutlu haritalama sistemleri

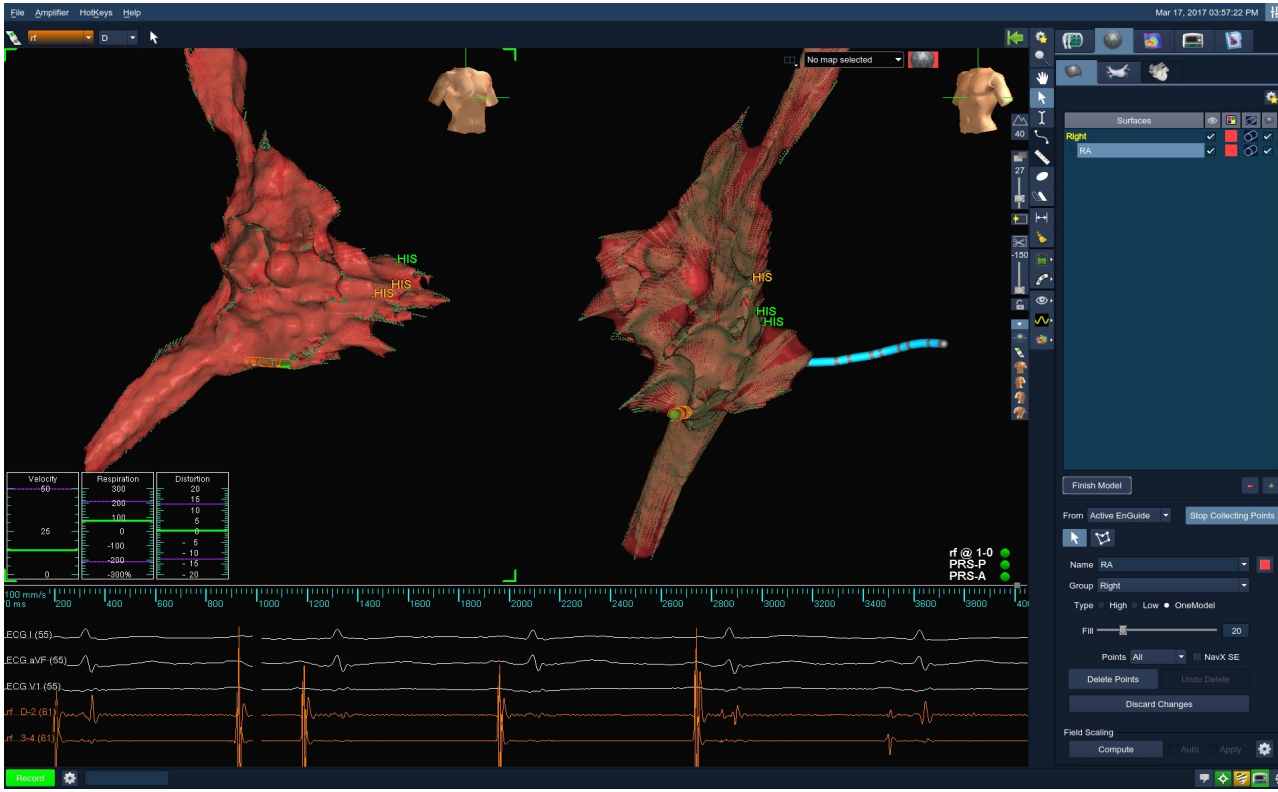


- Saat yönünün tersine tipik AFL
- Aktivasyon zinciri

3 Boyutlu haritalama sistemleri



- İstmal bloğun gösterilmesi
- CS Os dan pace ile Aktivasyon zinciri
 - en erken kırmızı
 - en geç mor



Tipik AFL Ablasyonu

- Konvansiyonel
 - 4 mm RF kateteri
- 3D haritalama
 - Anatomik/sinyal harita
 - irrigasyon uçlu
 - kontakt sensörlü
 - 0 floro

%60 Başarı

≥%95 Başarı