Atrial Tachycardia Ablation from the Non-coronary Aortic Cusp

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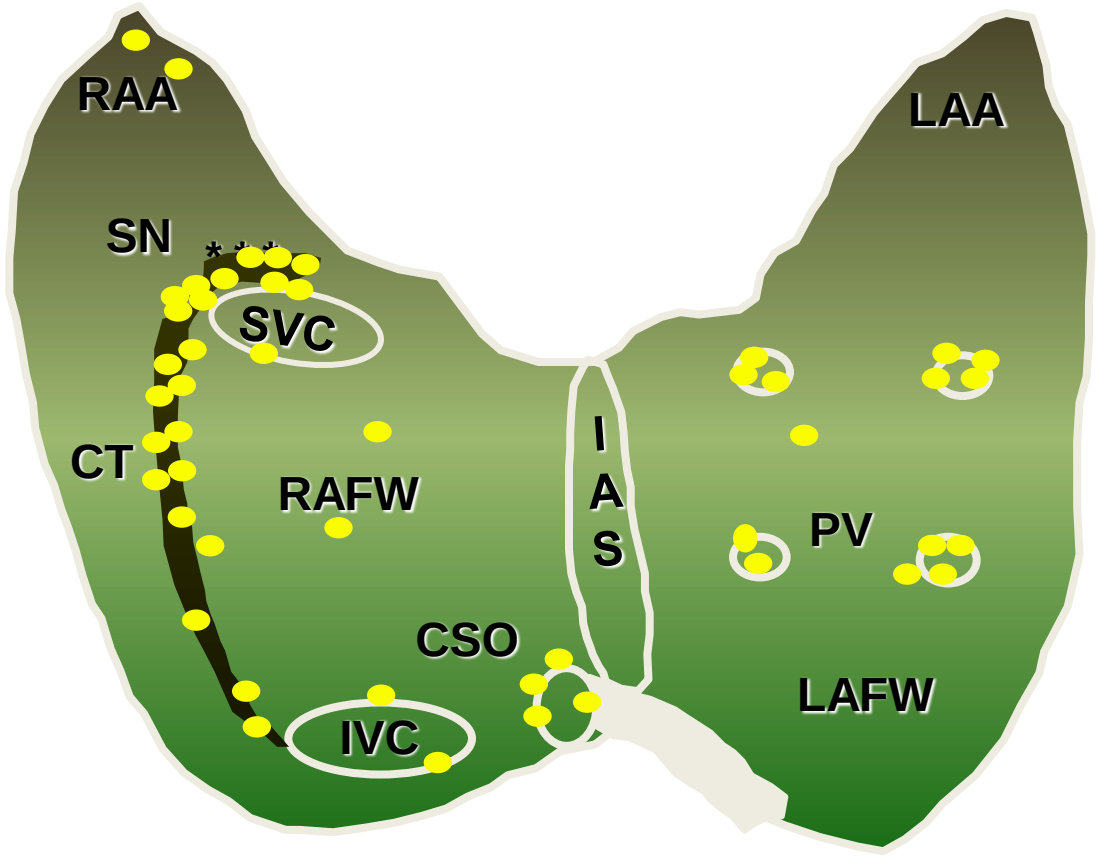
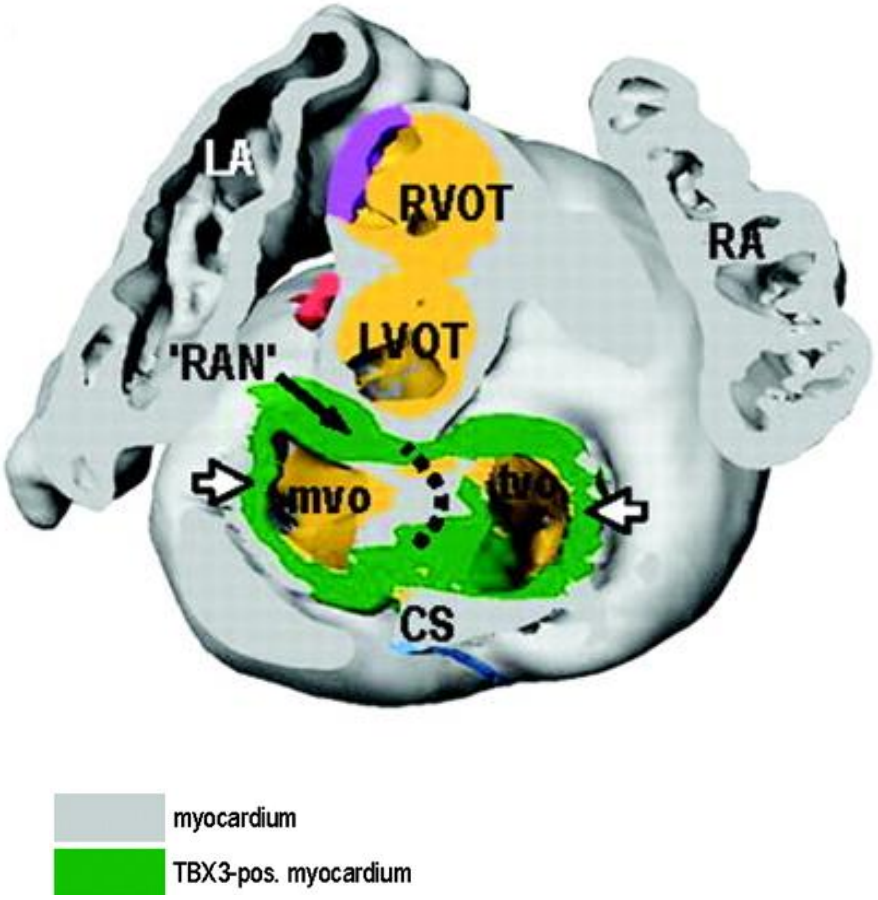
Hungary

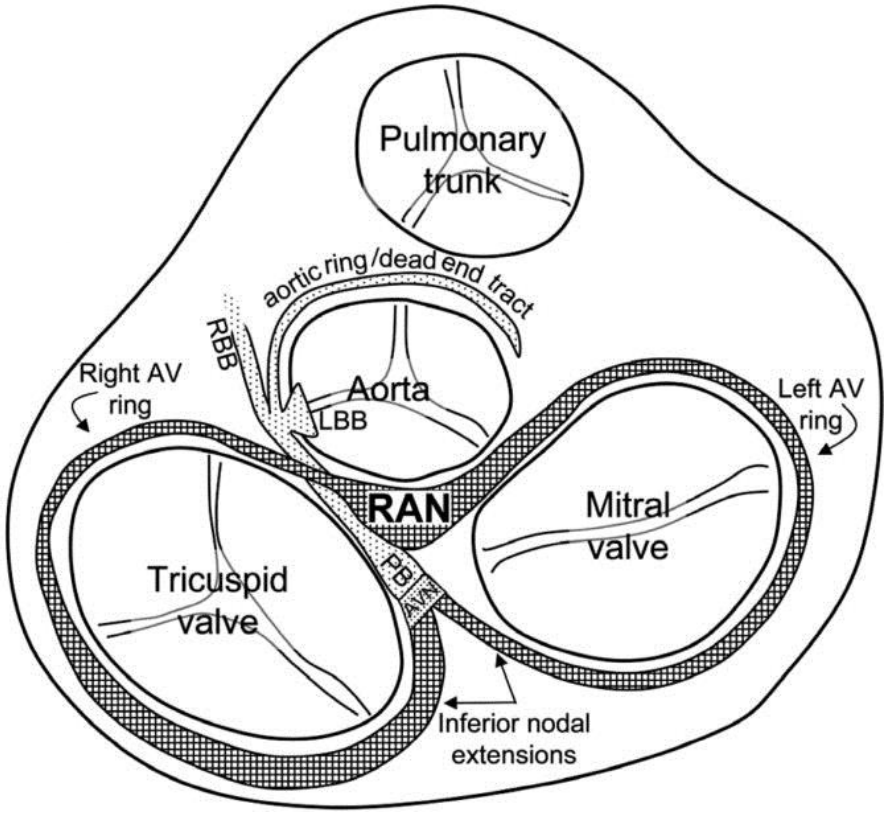
Focal Atrial Tachycardia



Chen et al JCE 2007

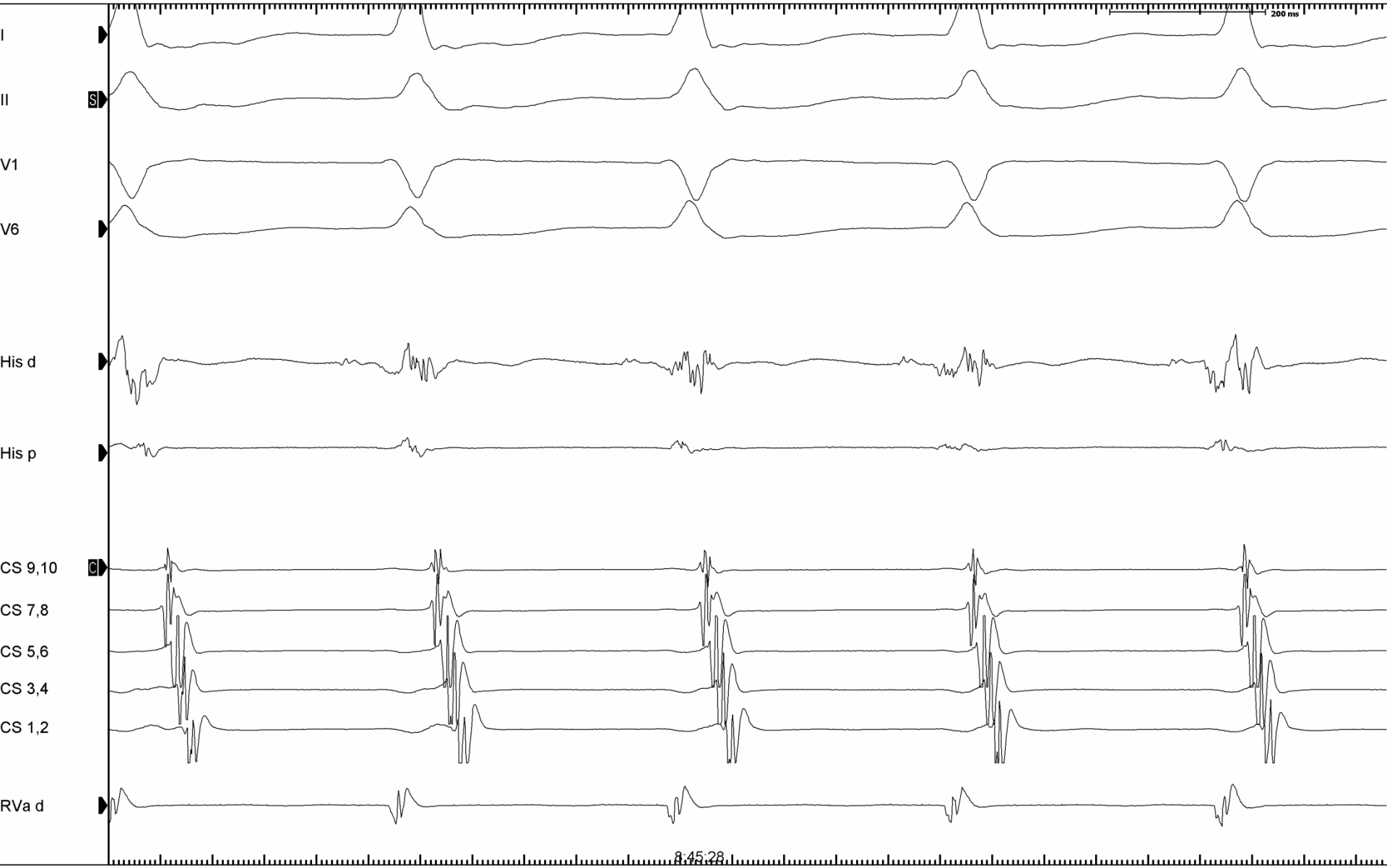
Specialized myocardium around the AV rings

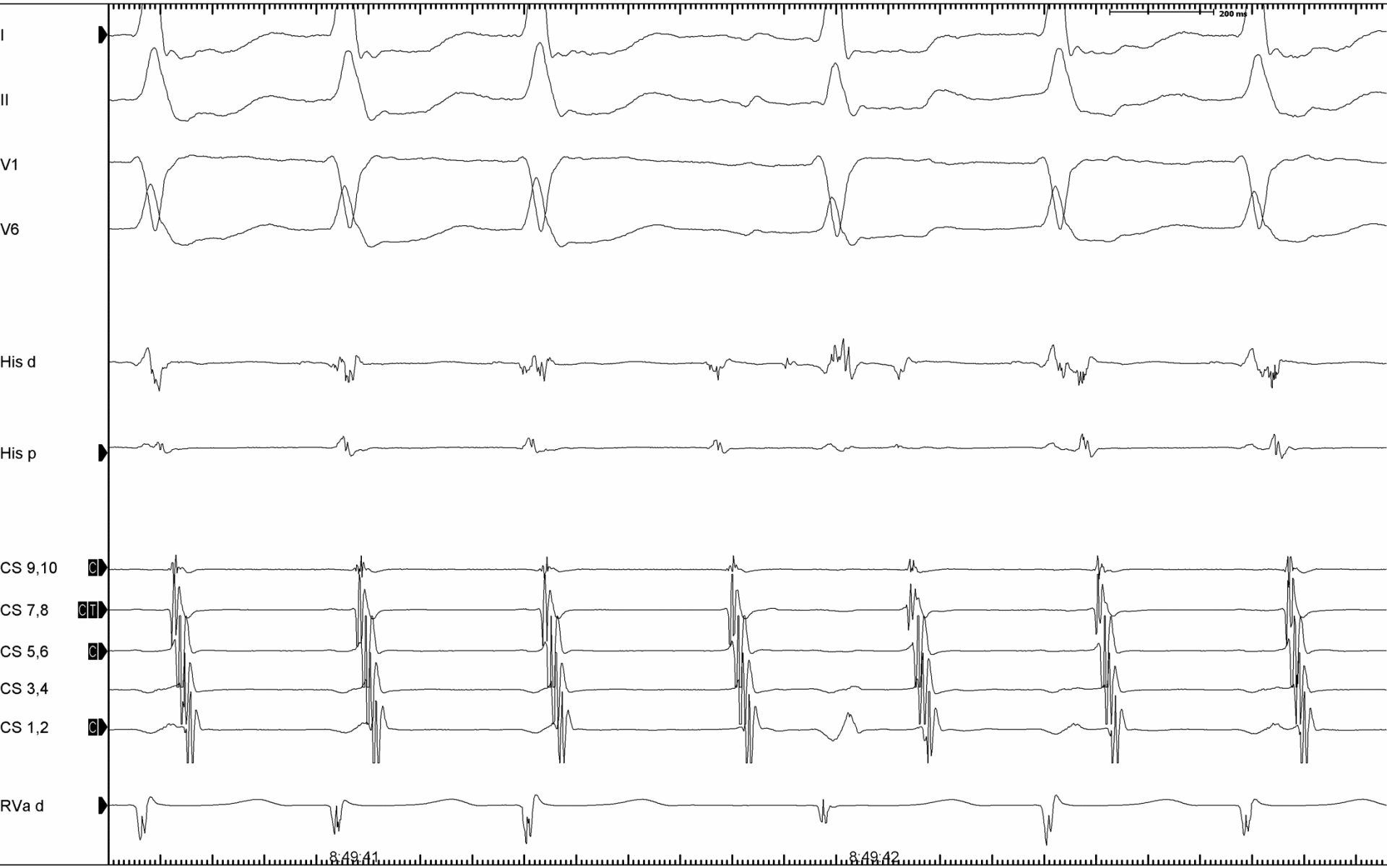




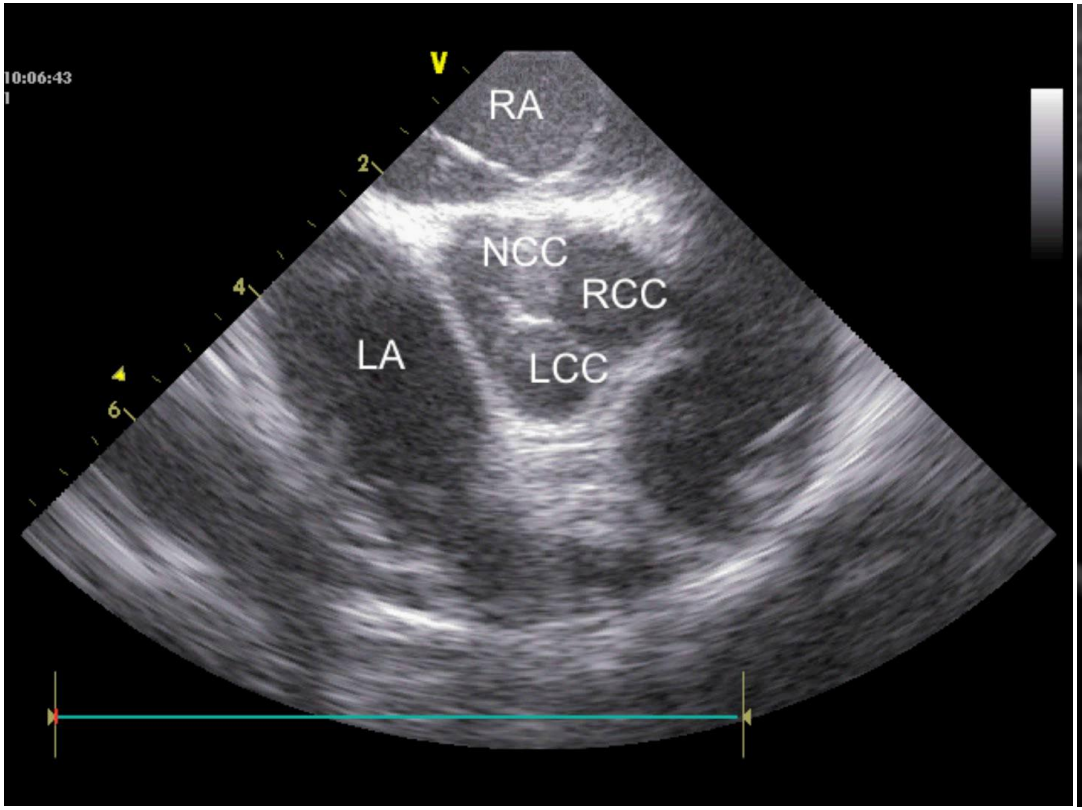
Sizarov et al. CircEP 2011

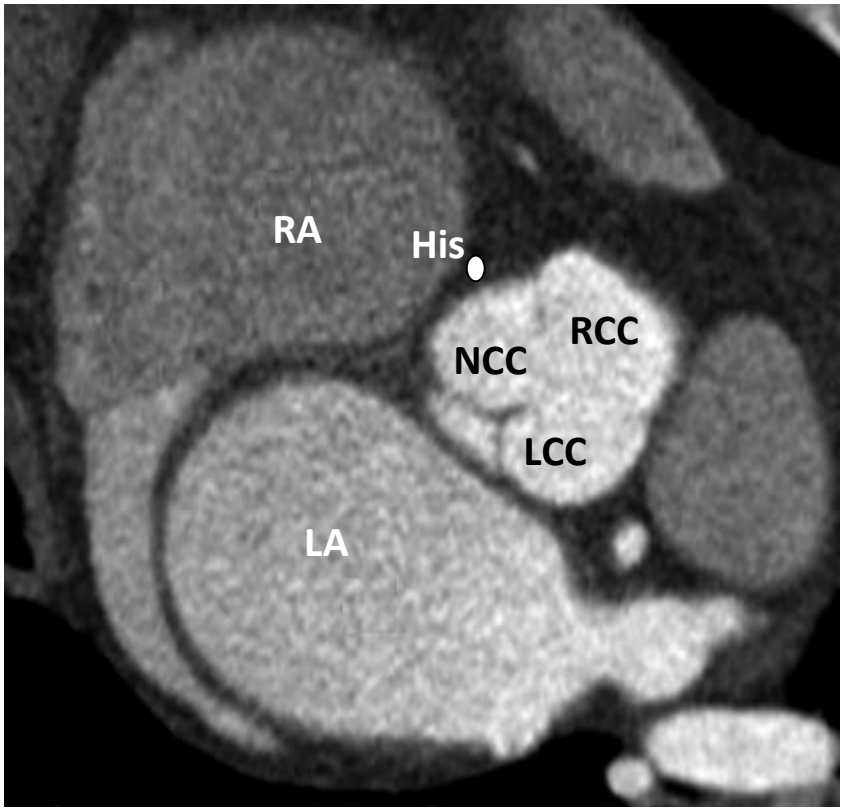
Yanni et al. Heart Rhythm 2009


200 ms
I
II
S
V1
V6
His d
His p
CS 9,10
C
CS 7,8
CS 5,6
CS 3,4
CS 1,2
RVa d
8:45:28

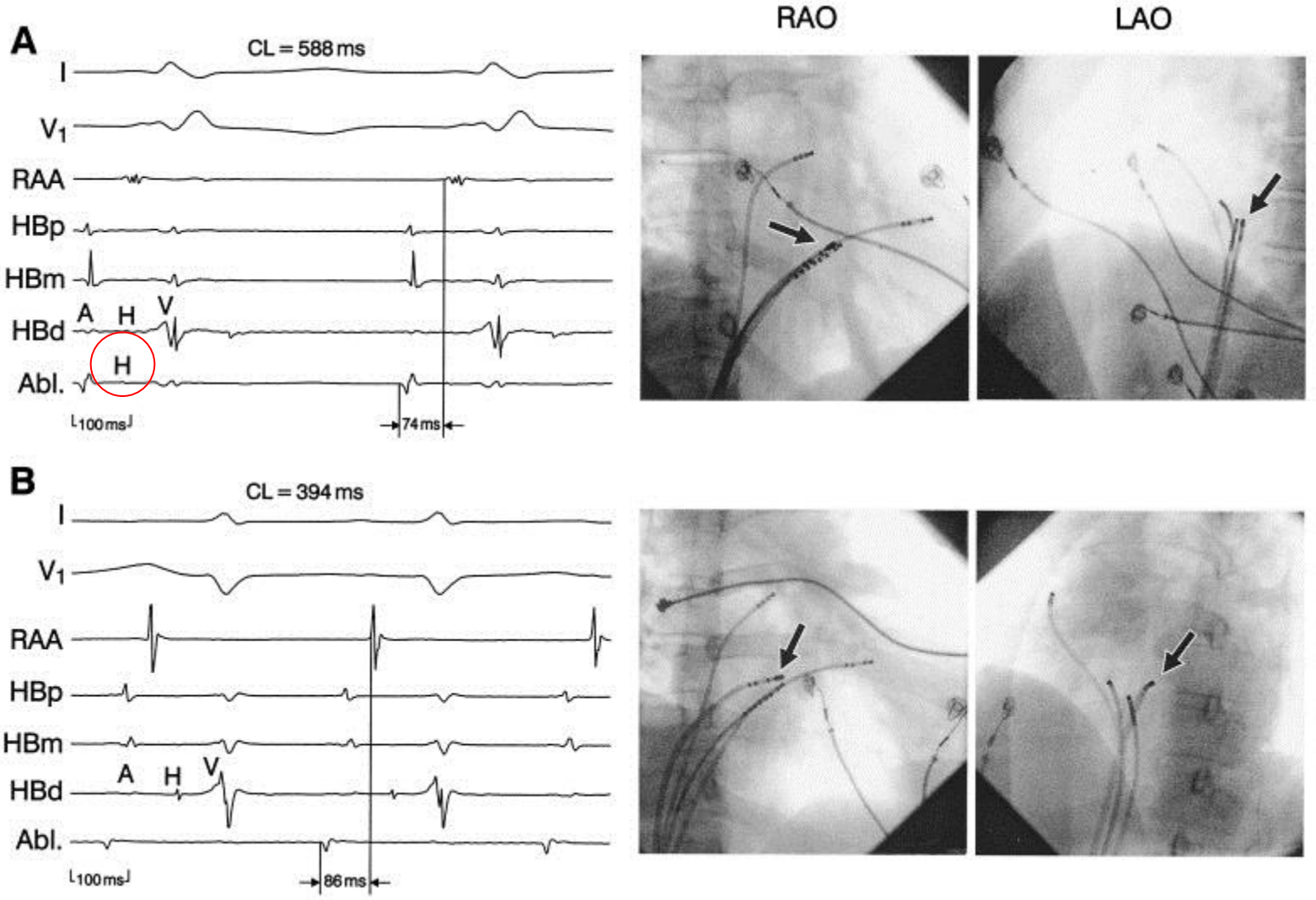

I
II
V1
V6
His d
His p
CS 9,10
CS 7,8
CS 5,6
CS 3,4
CS 1,2
RVa d
200 ms
8:49:41
8:49:42

Anatomy



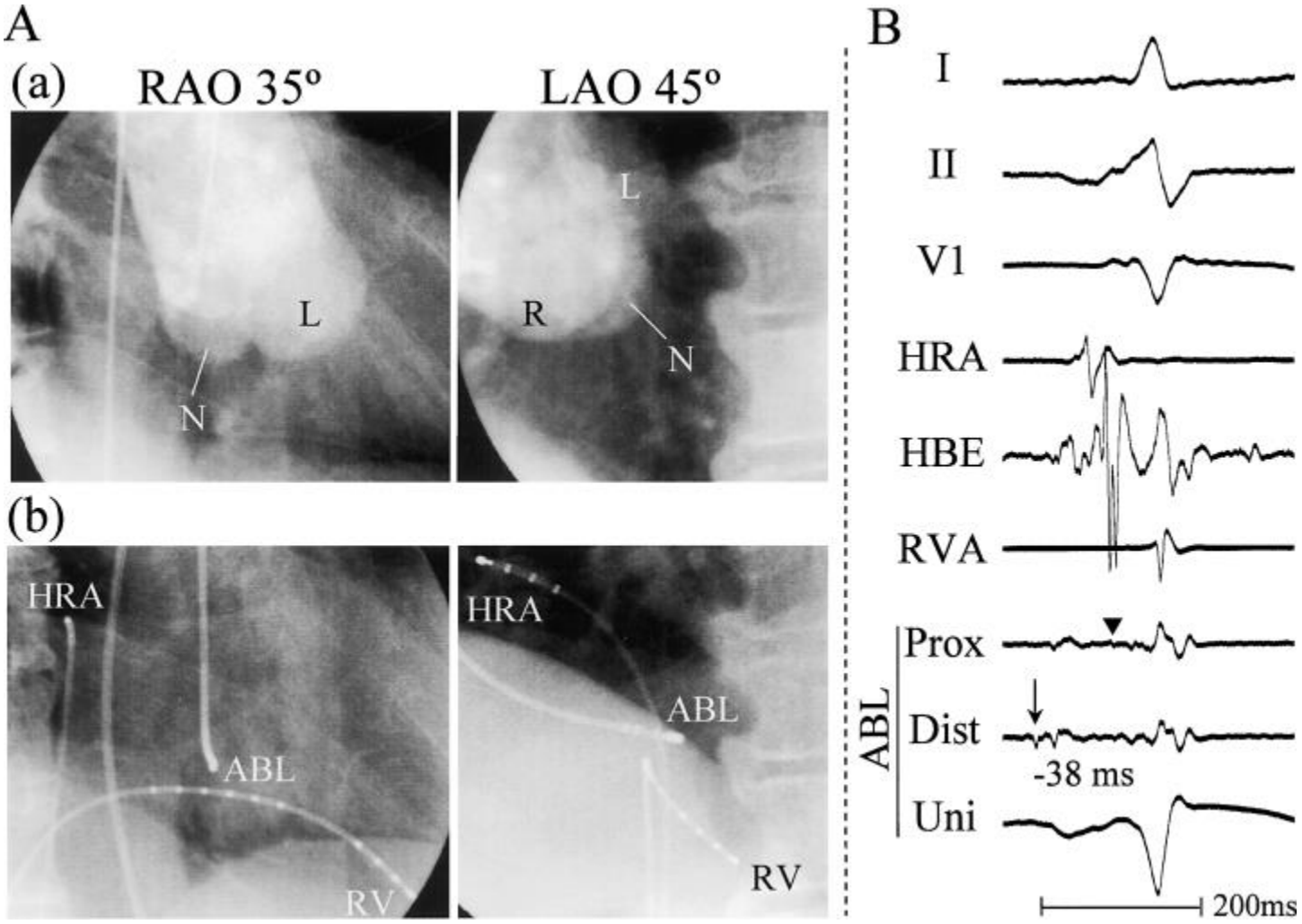


Mapping of peri-AV-nodal AT



Frey et al. JACC 2001

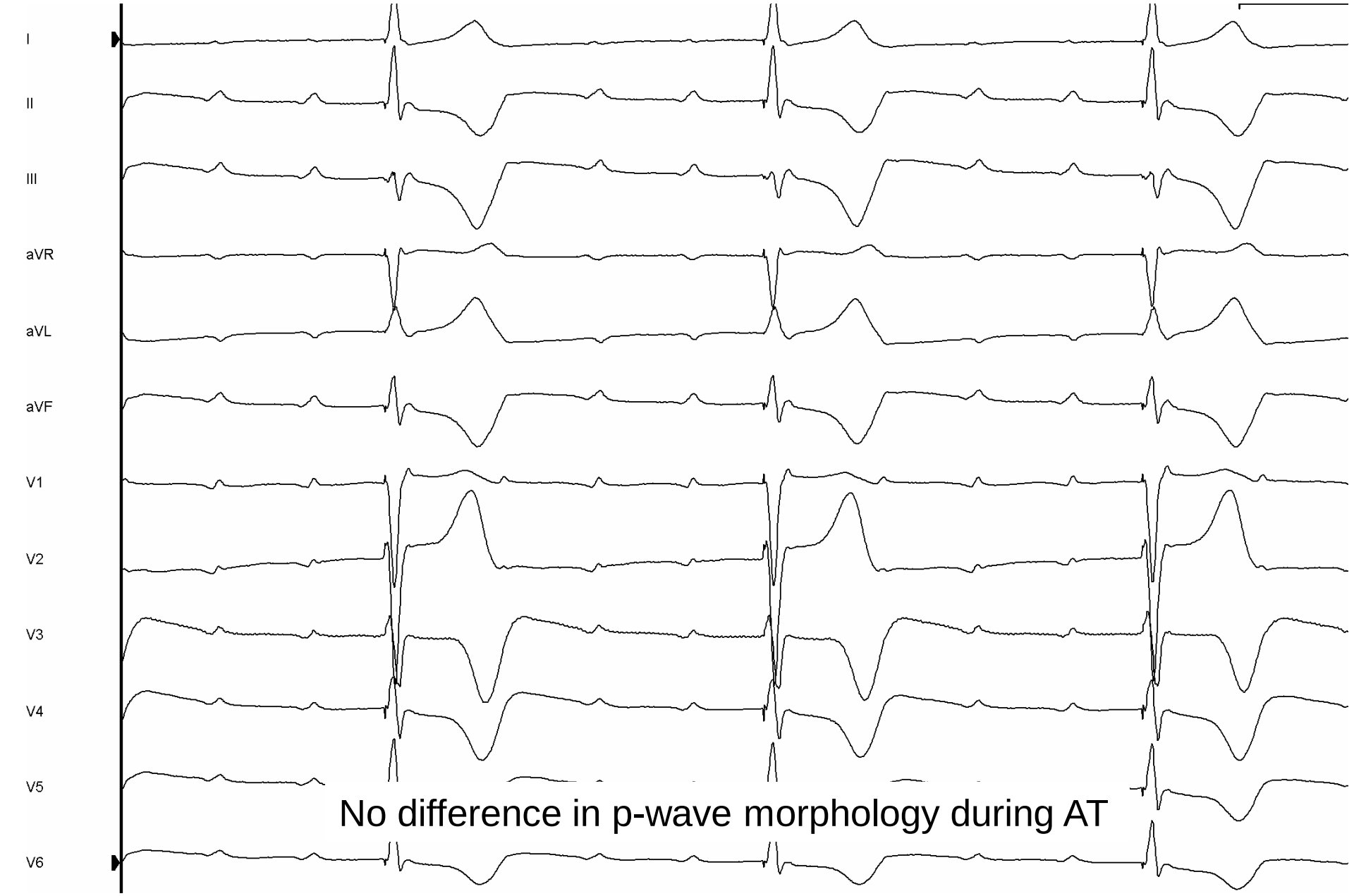
Ablation from the NCC

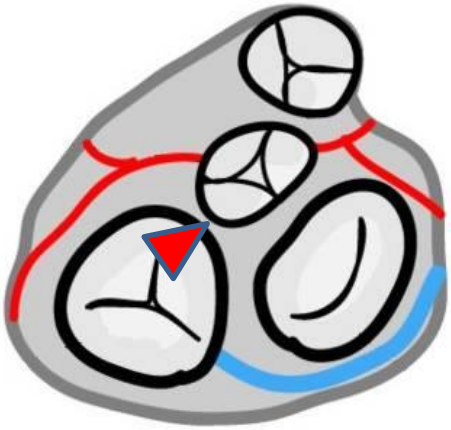


Tada et al. PACE 2004

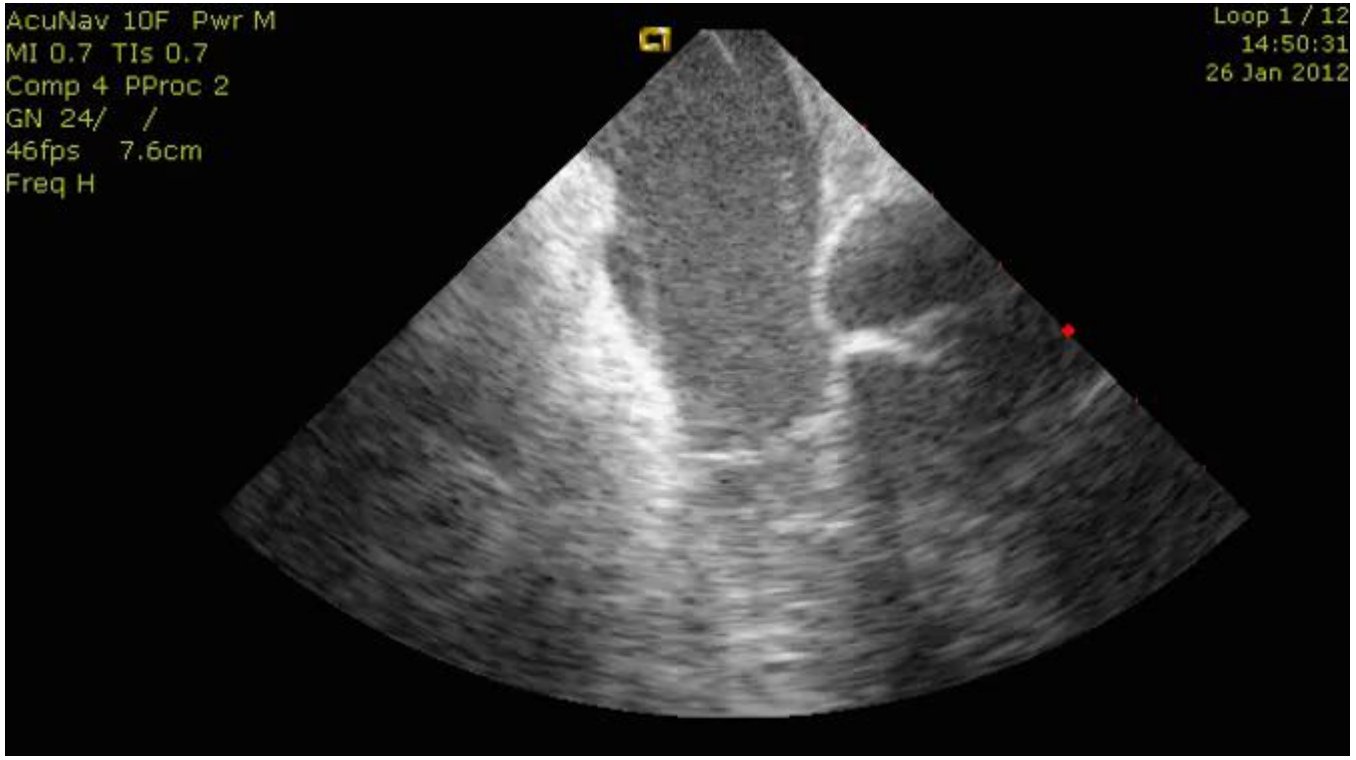
34/148 (23%) patients with AT (2006-2014)

	RA (N=7)	NCC (N=20)	LA (N=7)	*p*
Age (years, mean ± SD)	51±18	66±9	57±19	0.04
Female (%)	71	80	100	NS
Hypertension (%)	57	82	57	NS
Diabetes (%)	14	21	14	NS
Persistent/incessant (%)	0	10	29	NS
LVEF (%, mean ± SD)	67±8	63±7	59±10	NS
LAd (mm, mean ± SD)	48±13	44±5	37±6	NS

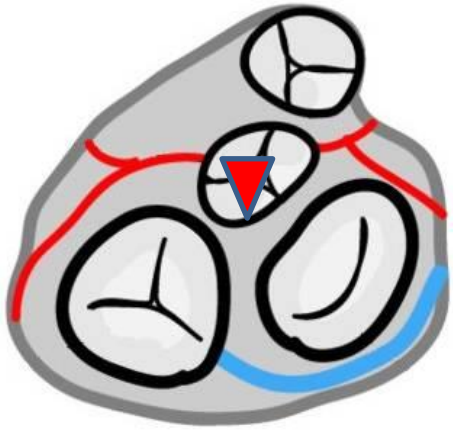

I
II
III
aVR
aVL
aVF
V1
V2
V3
V4
V5
V6
No difference in p-wave morphology during AT

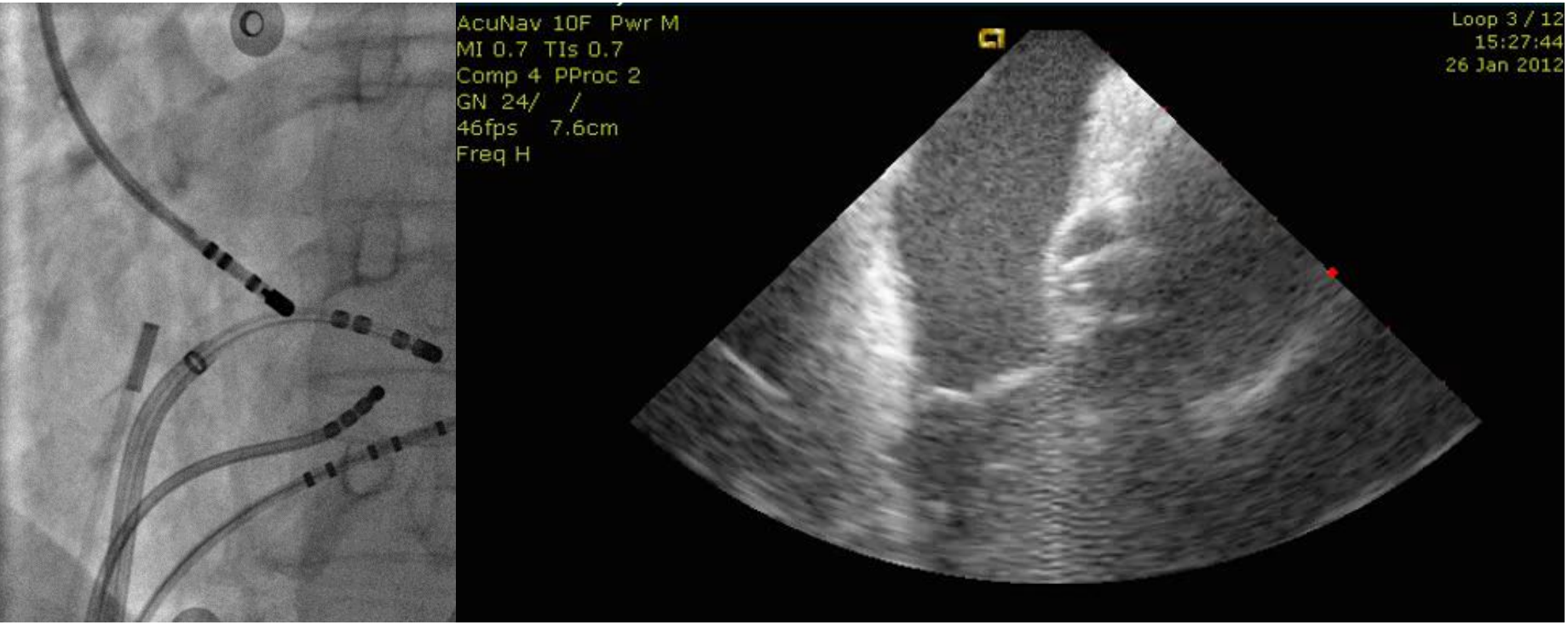


RA ablation (7 pts)



NCC ablation (20 pts)

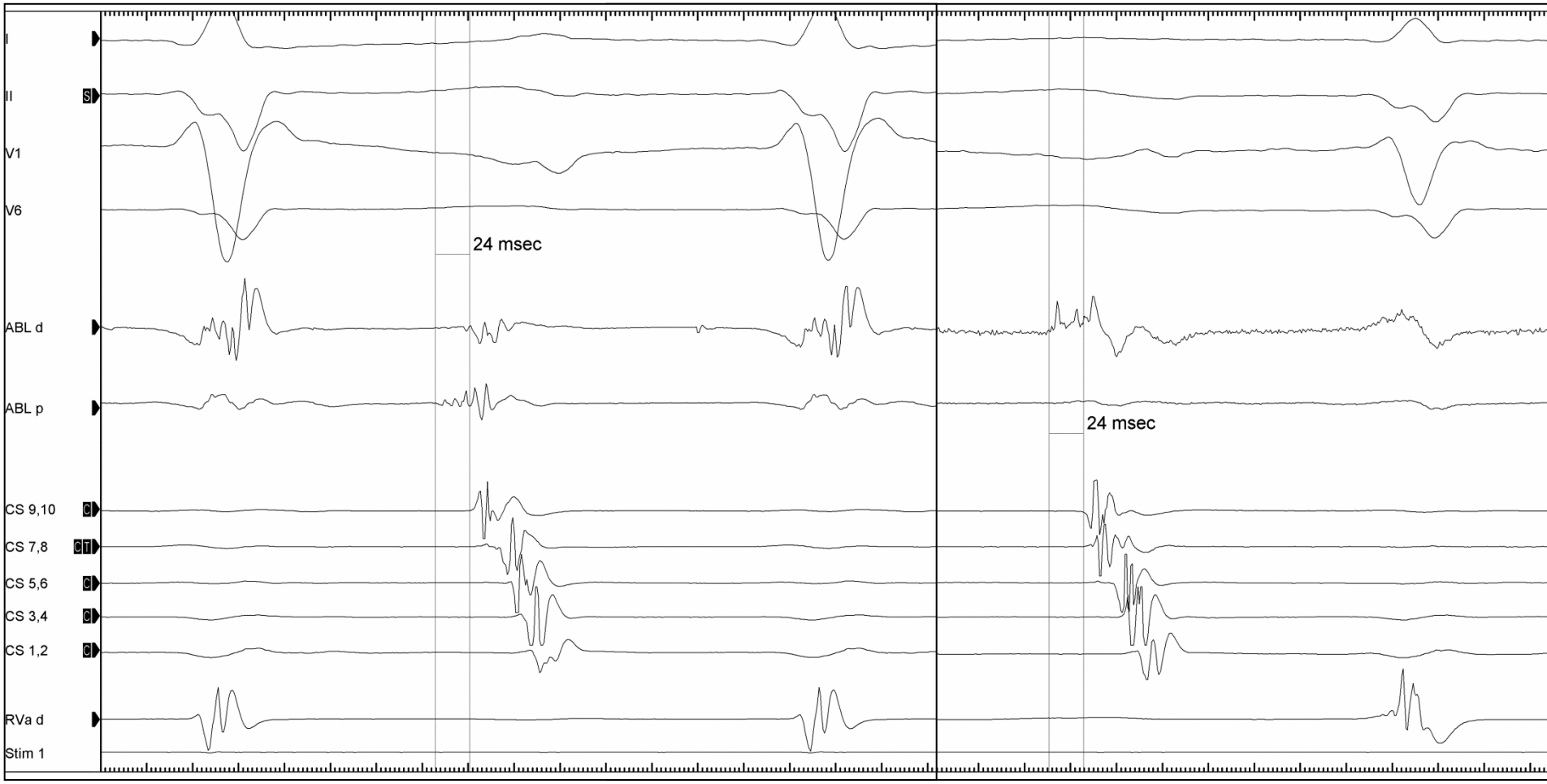




Aortic root mapping

His region

NCC

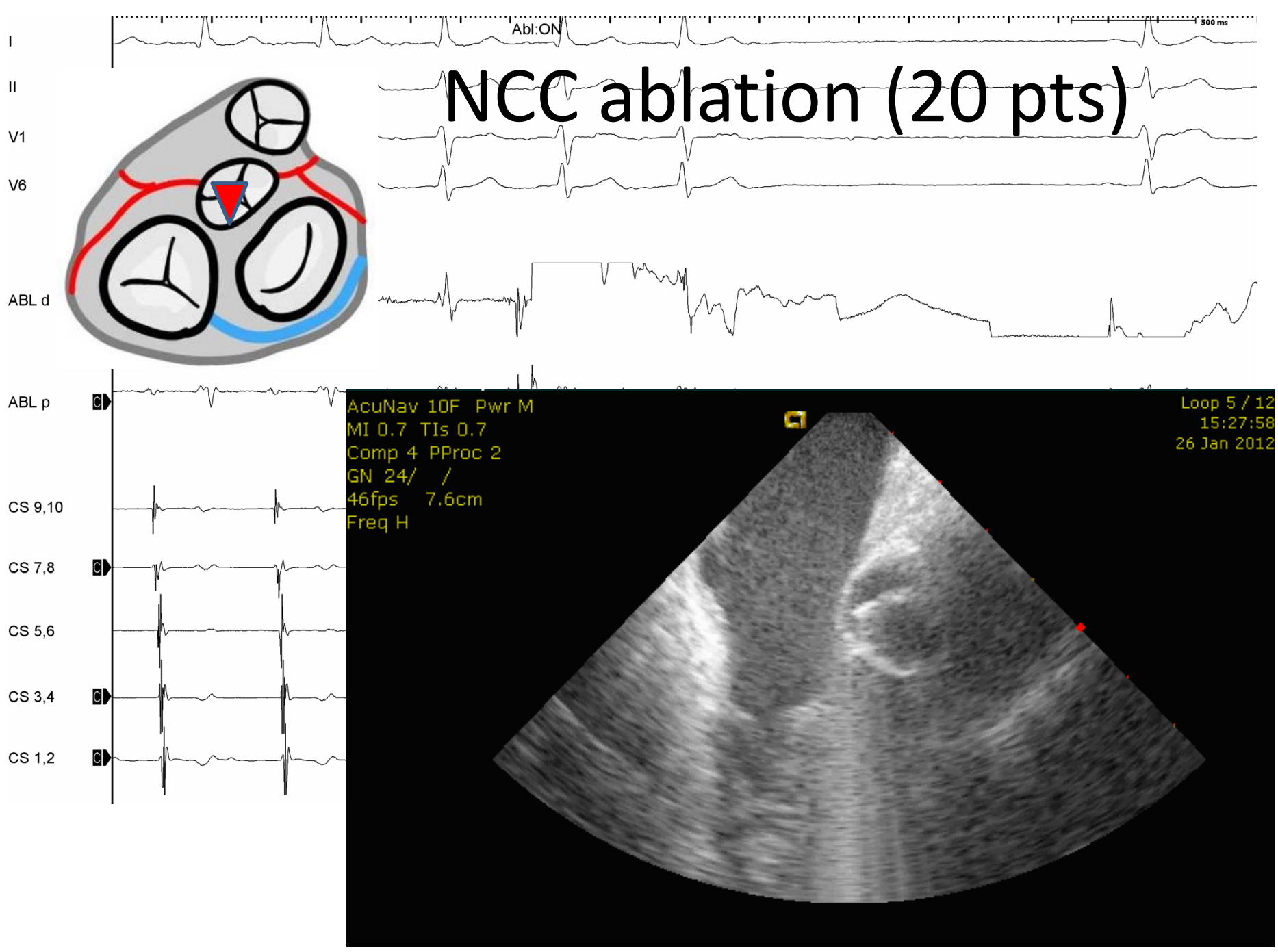


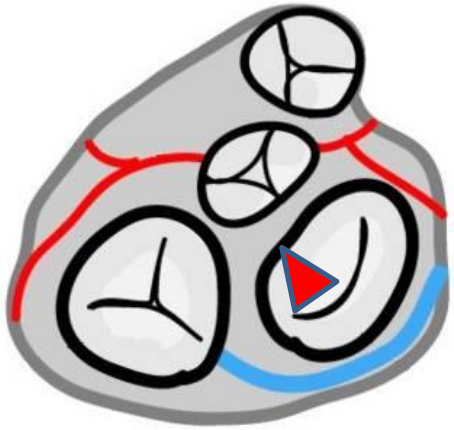
27.1±12.5

29.9±11.8

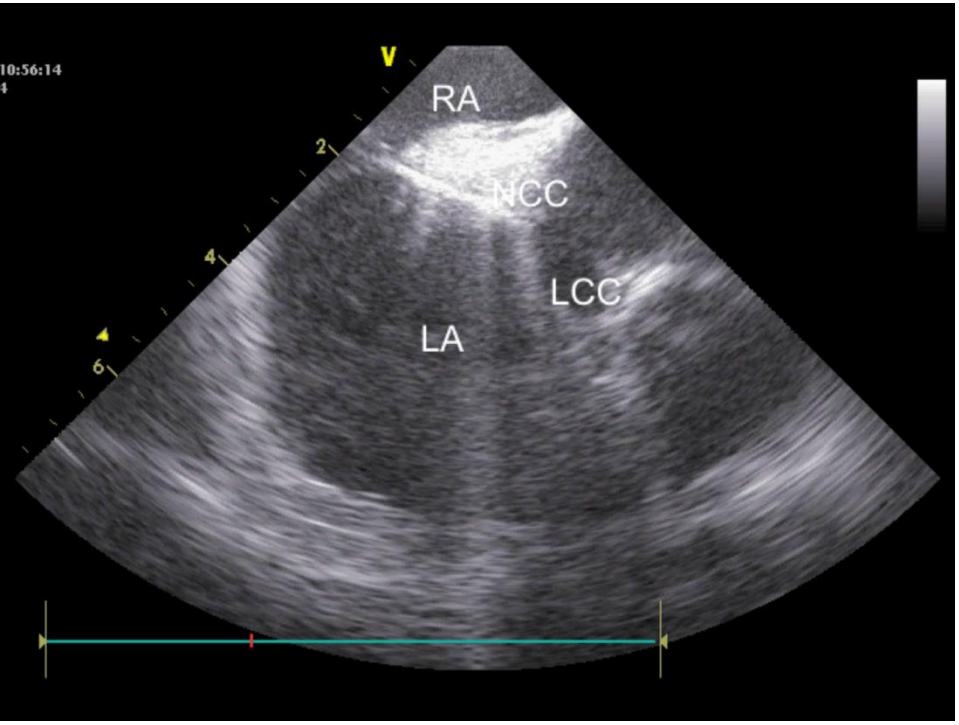
p= 0.56

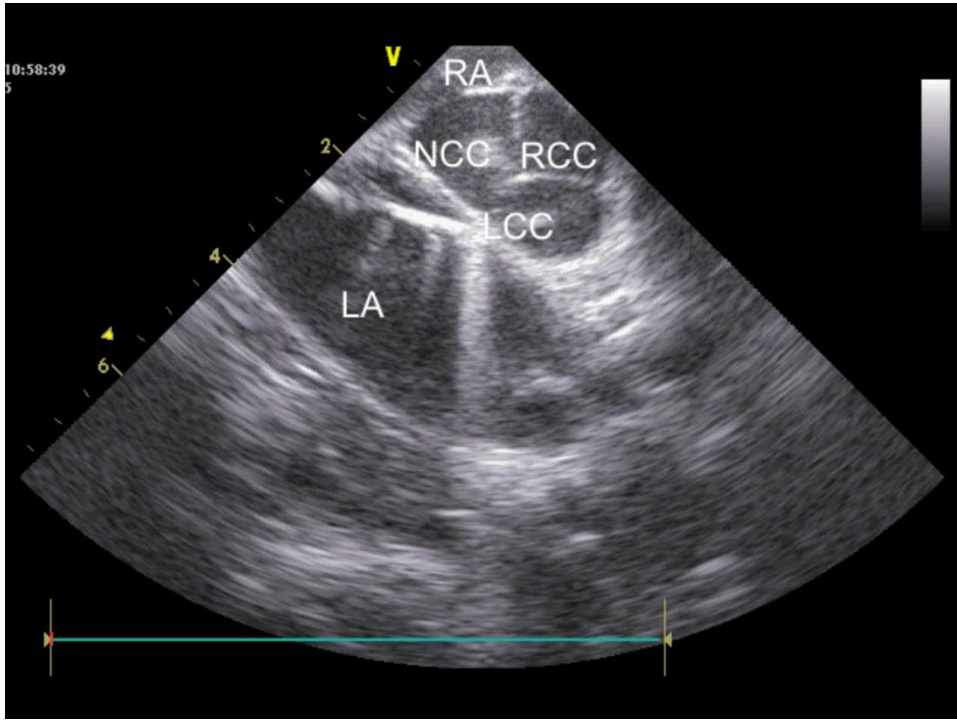
NCC ablation (20 pts)



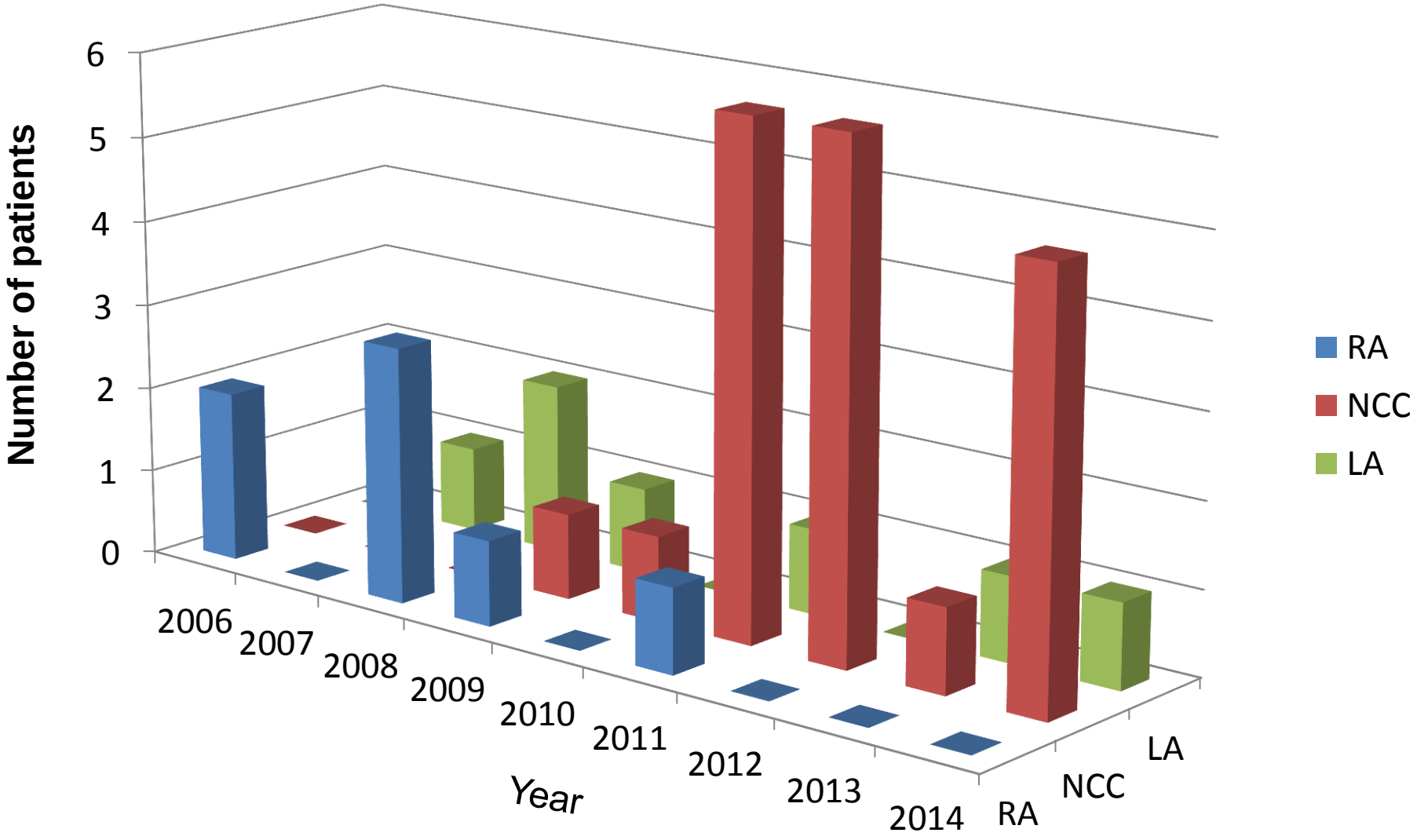


LA (AMC) ablation (7 pts)

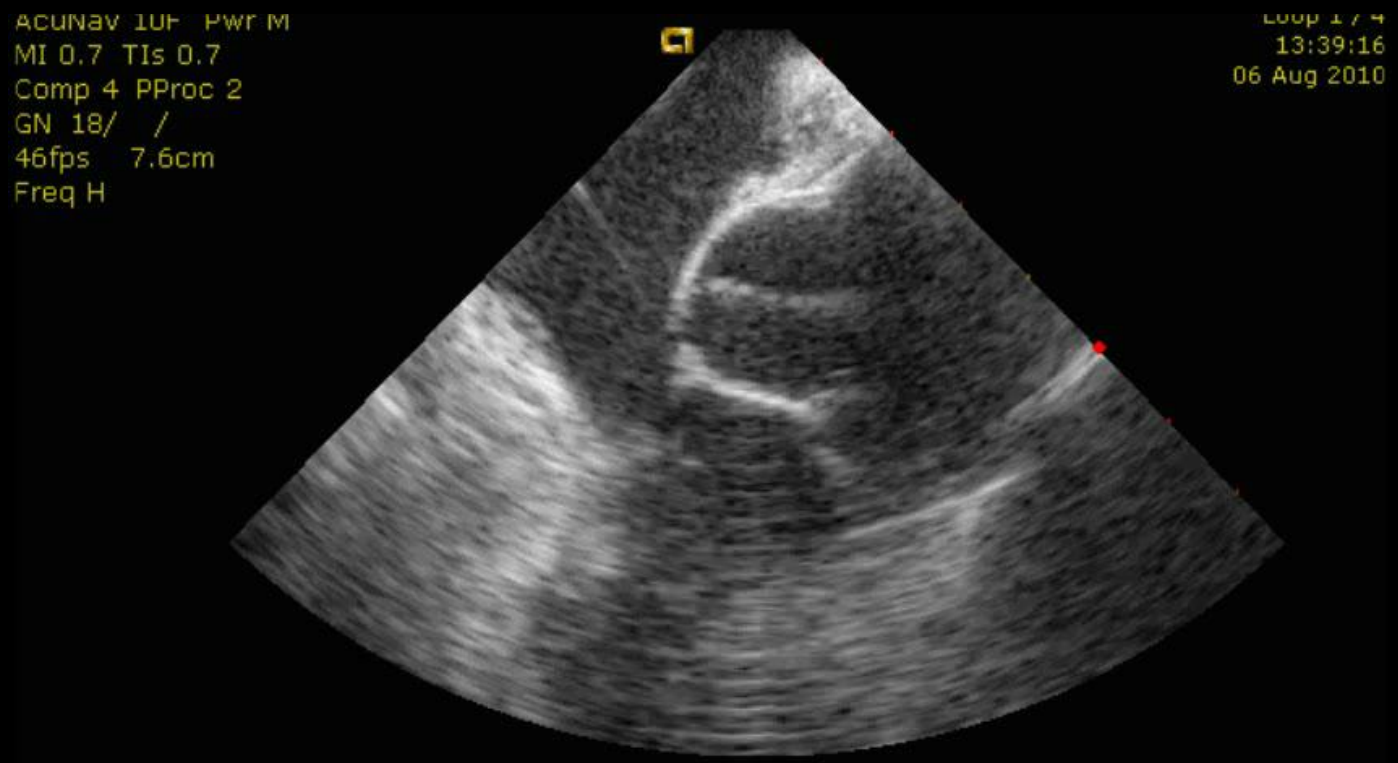




Evolution of the approach to peri-AV nodal AT



Conclusions



- The NCC provides the best anatomic vantage point for perinodal AT ablation
- The RA parahisian approach can be avoided
- Intracardiac echocardiography


01/08/2012 13:11:34
V
2
4
6
8
NCC
Thank you for your attention!