

Element 65.00

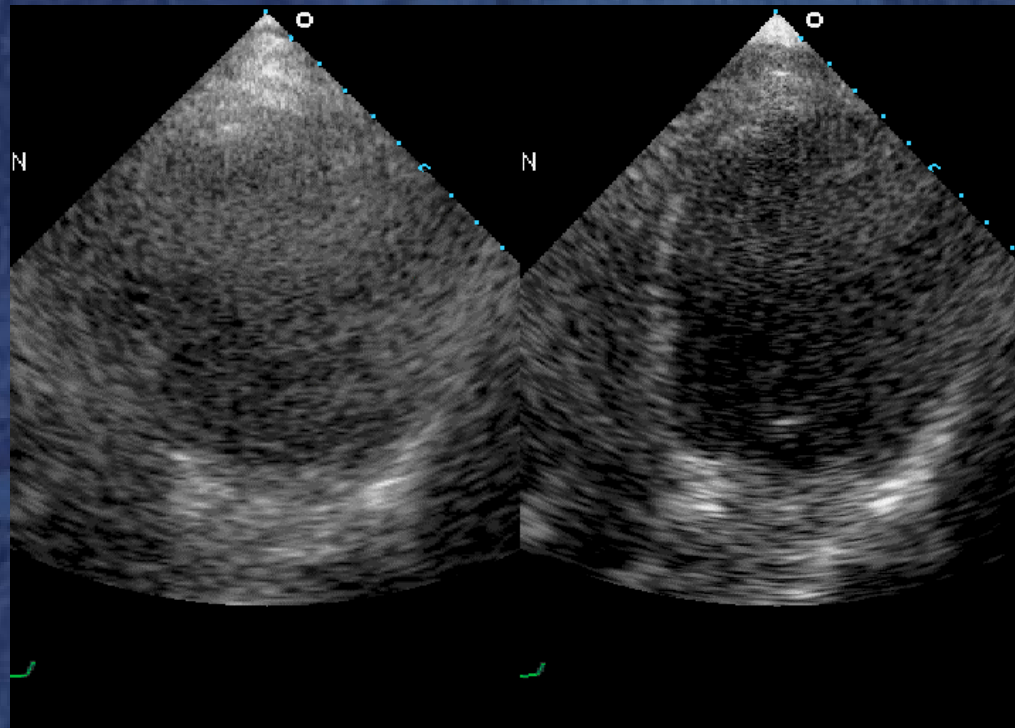
Monaghan

MOVIE

Assessment of LV Function

Crucial role for echo

- Global & regional function
- Complications (thrombus)



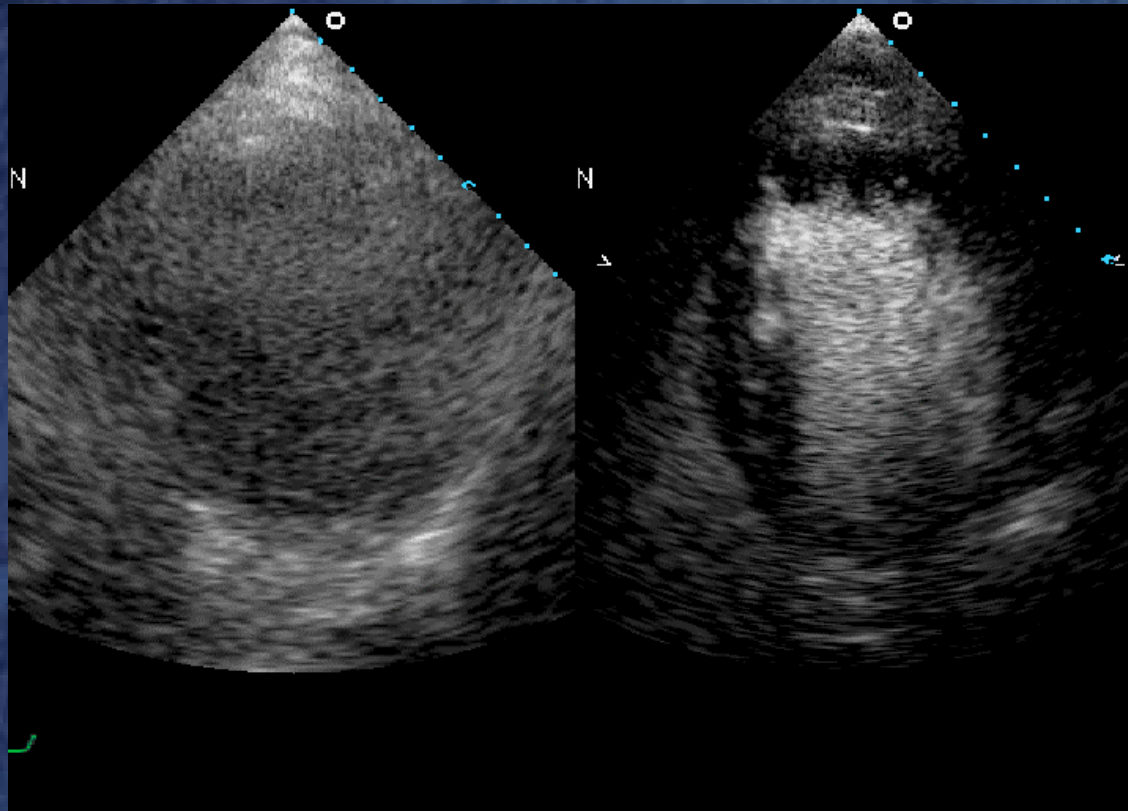
MOVIE

Assessment of LV Function

Crucial role for echo

Filtered harmonics

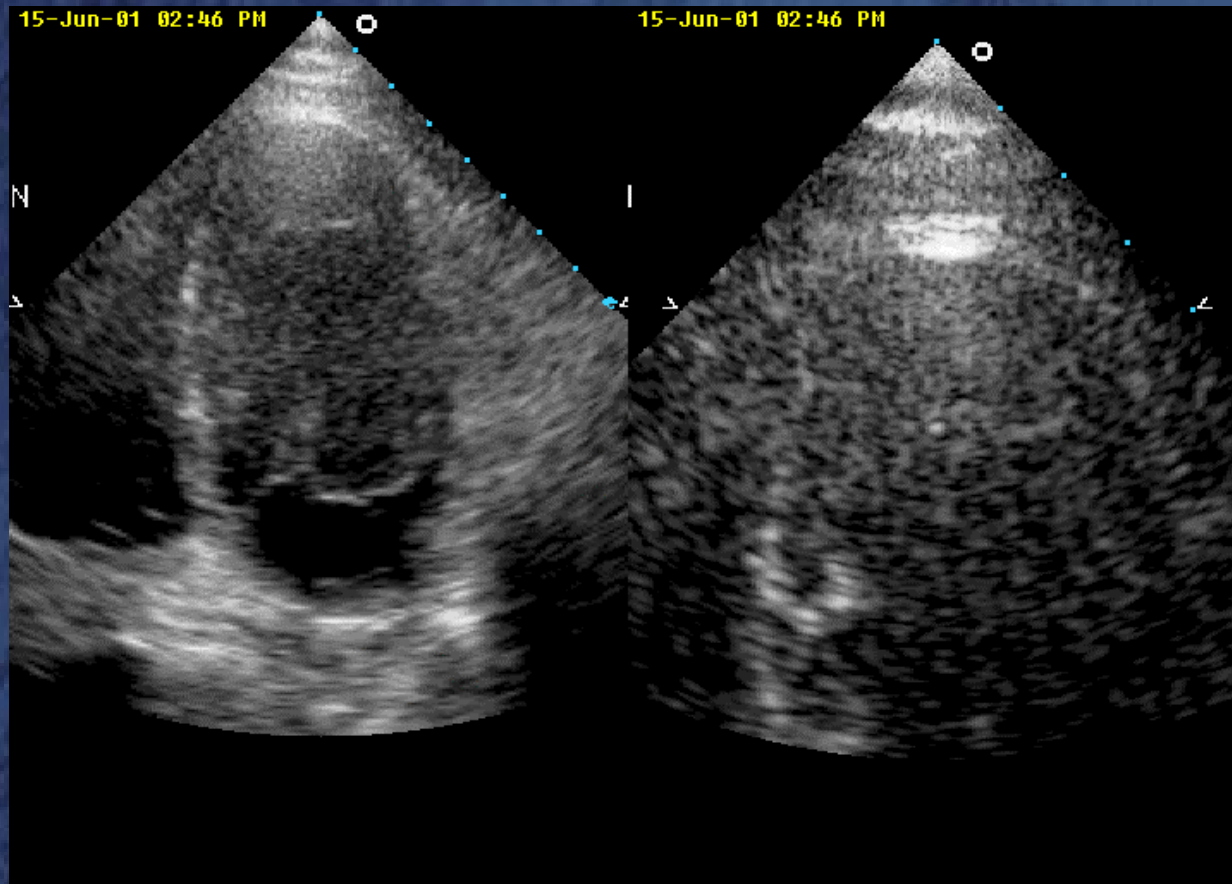
Contrast specific imaging
(power modulation)



MOVIE

Post Anterior MI - for CABG

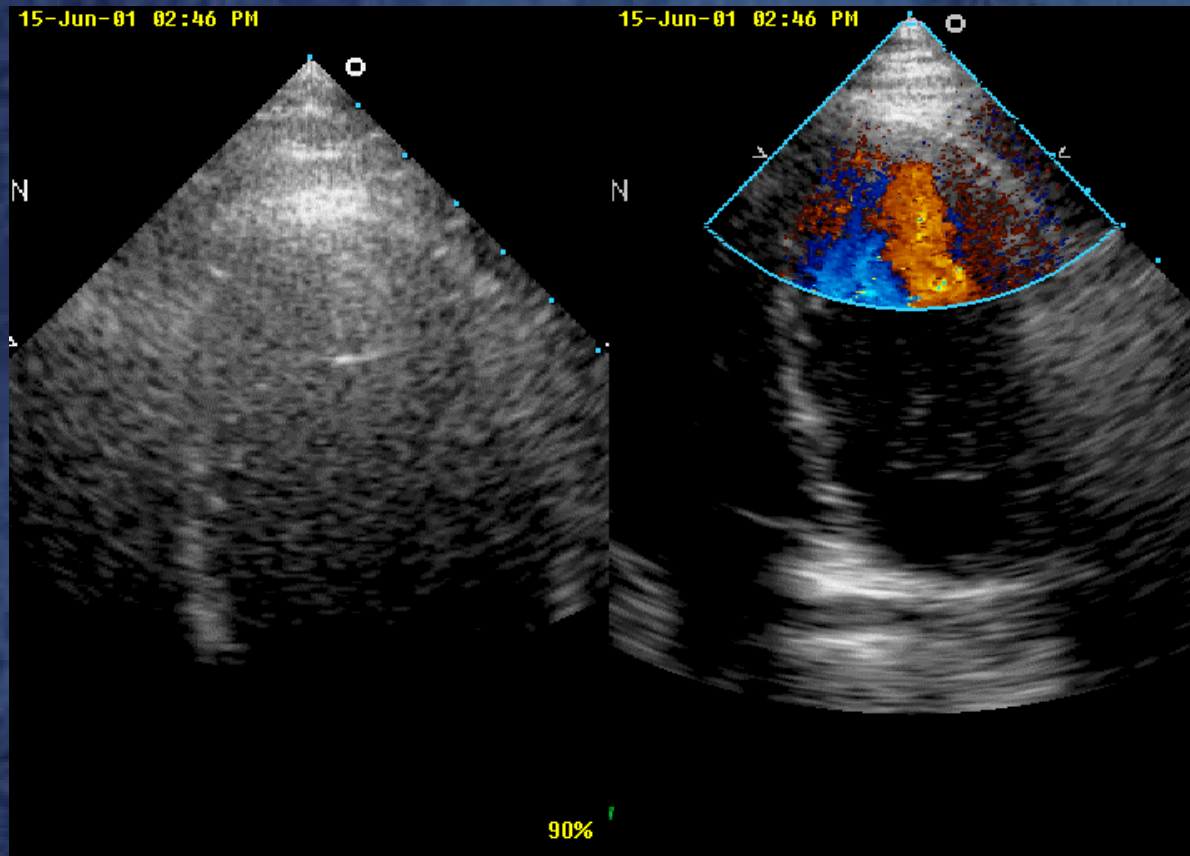
Thrombus or not?



MOVIE

Post Anterior MI - for CABG

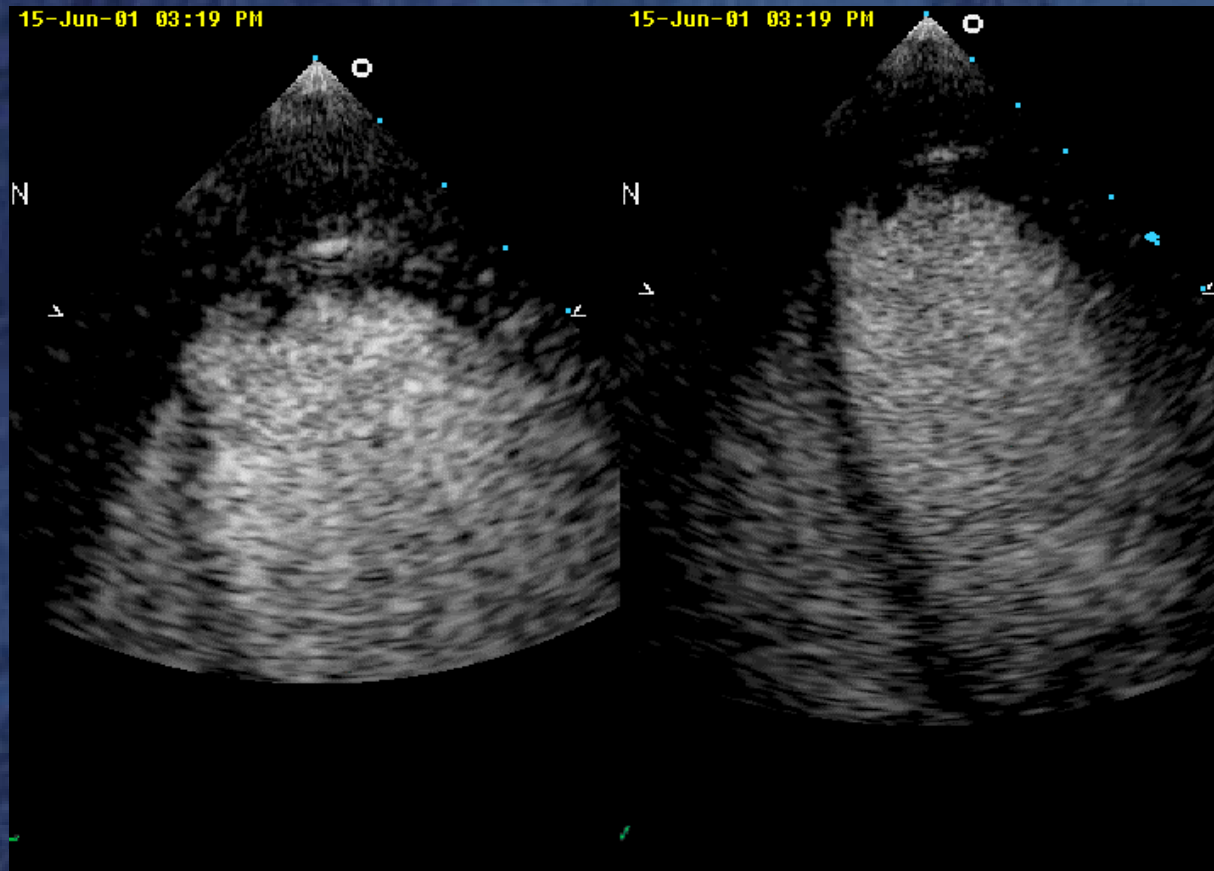
Thrombus or not?



MOVIE

Post Anterior MI - for CABG

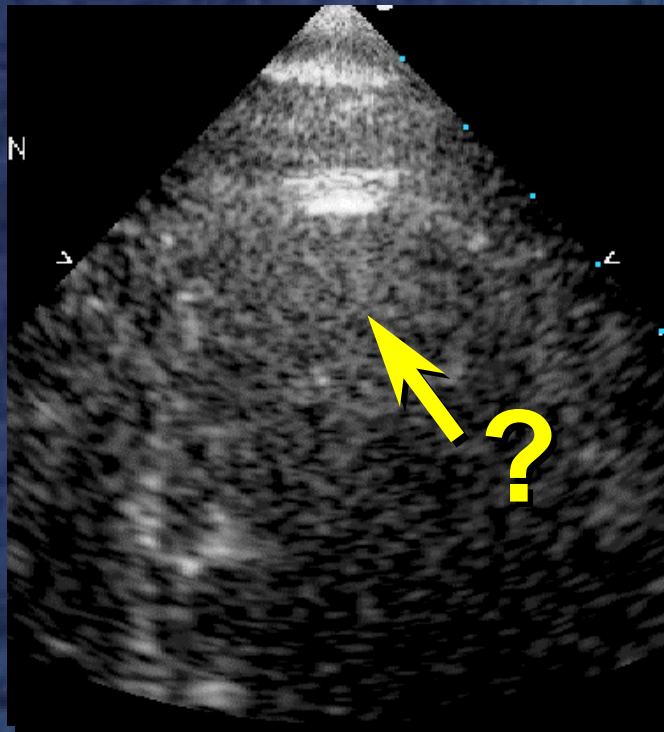
Thrombus or not?



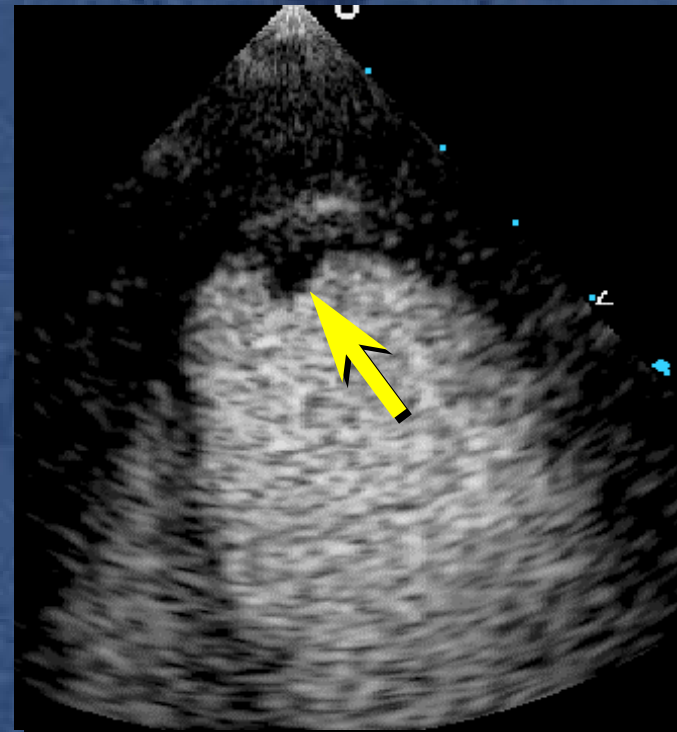
Post Anterior MI - for CABG

Thrombus or not?

“State of the Art”



Tissue Harmonics

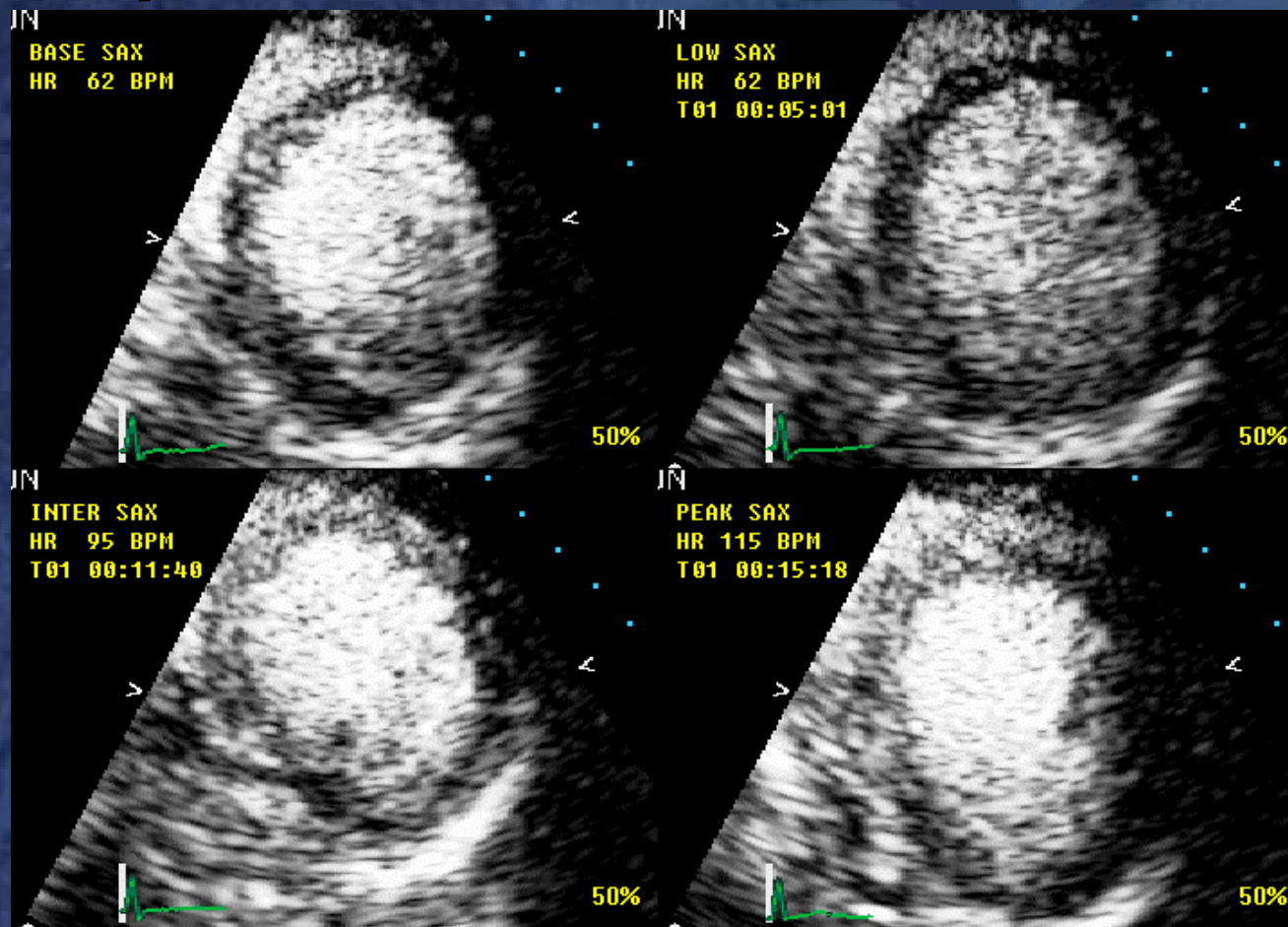


**Power modulation
+ contrast**

MOVIE

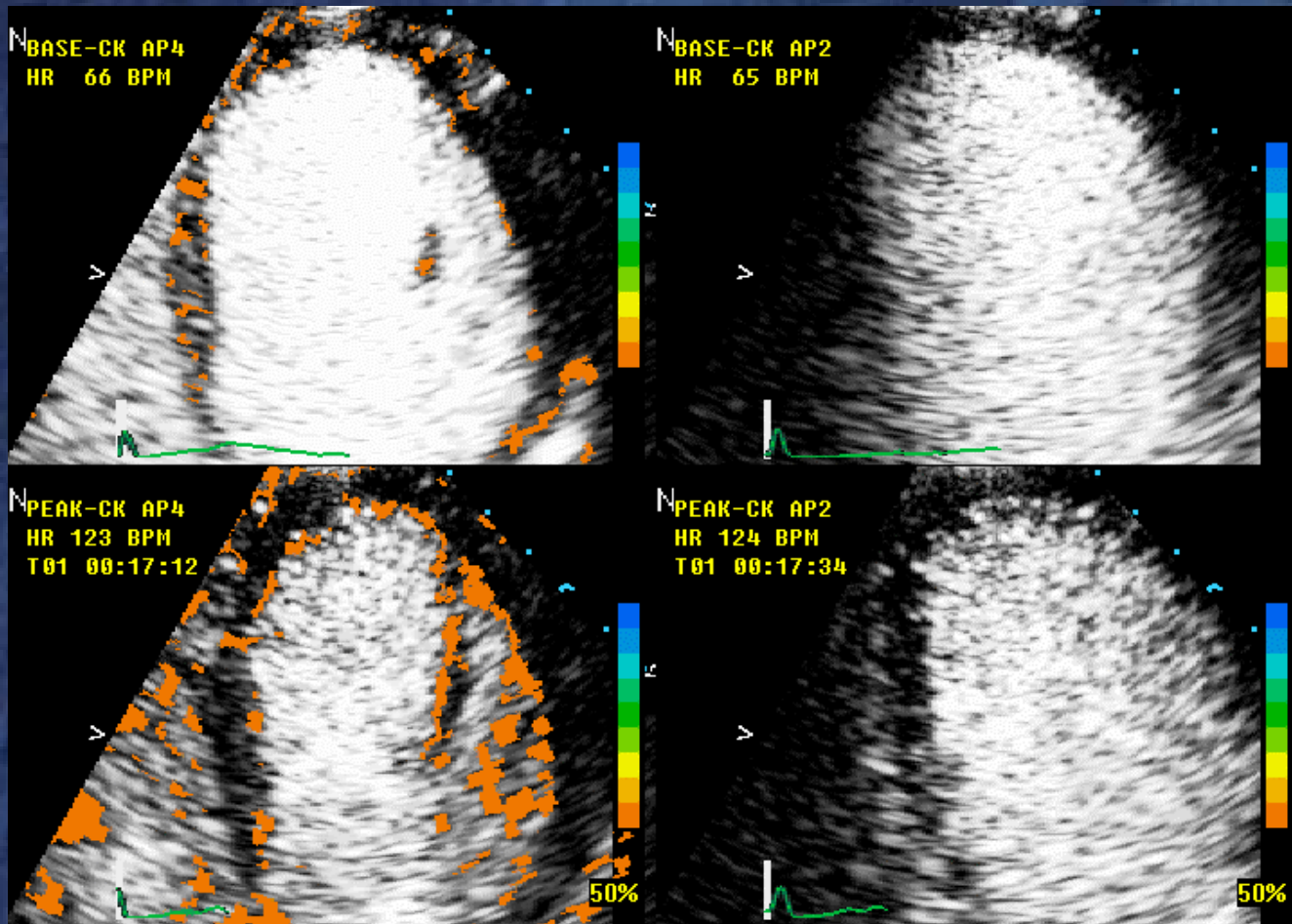
Contrast Stress

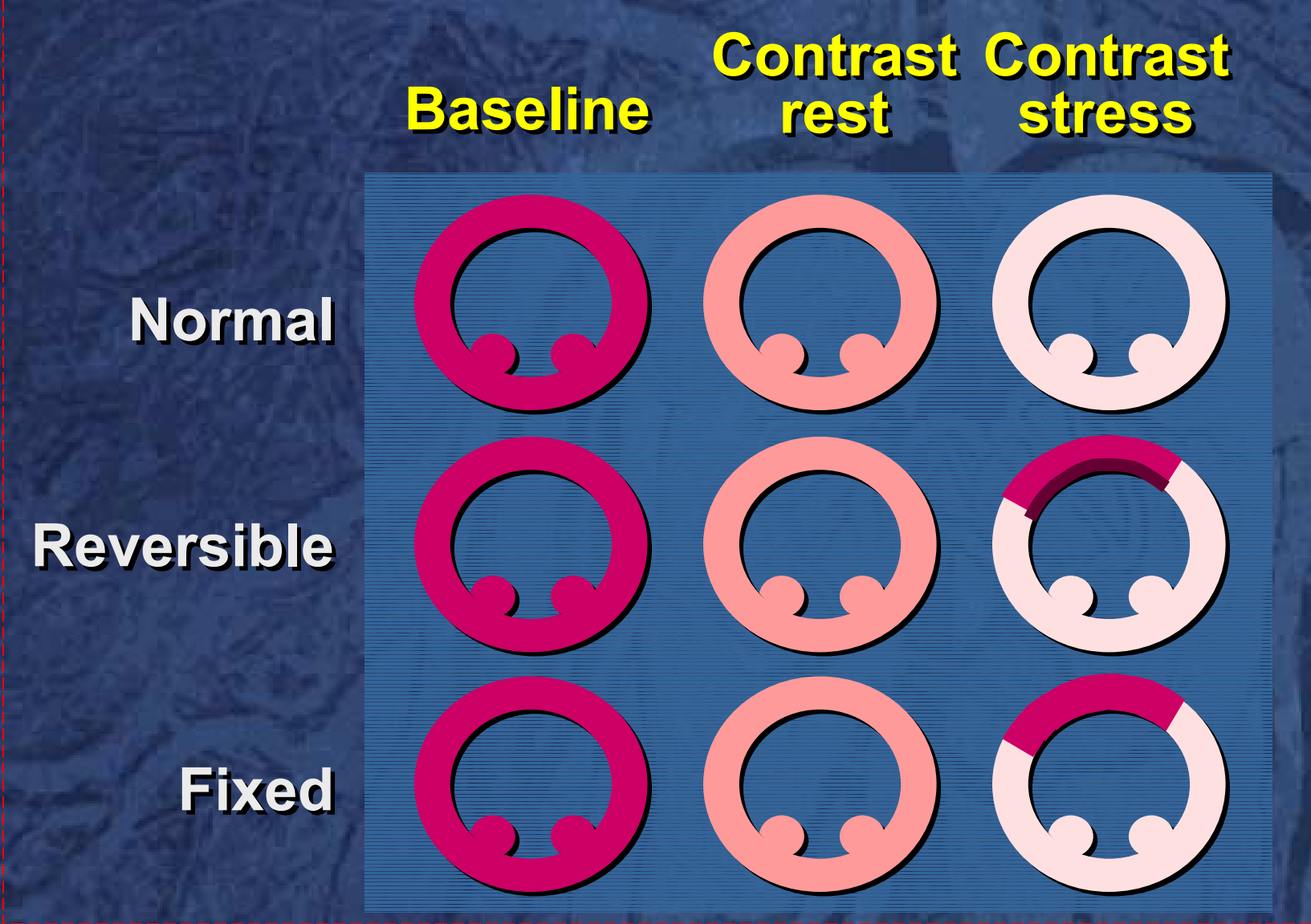
Improved endocardial definition



MOVIE

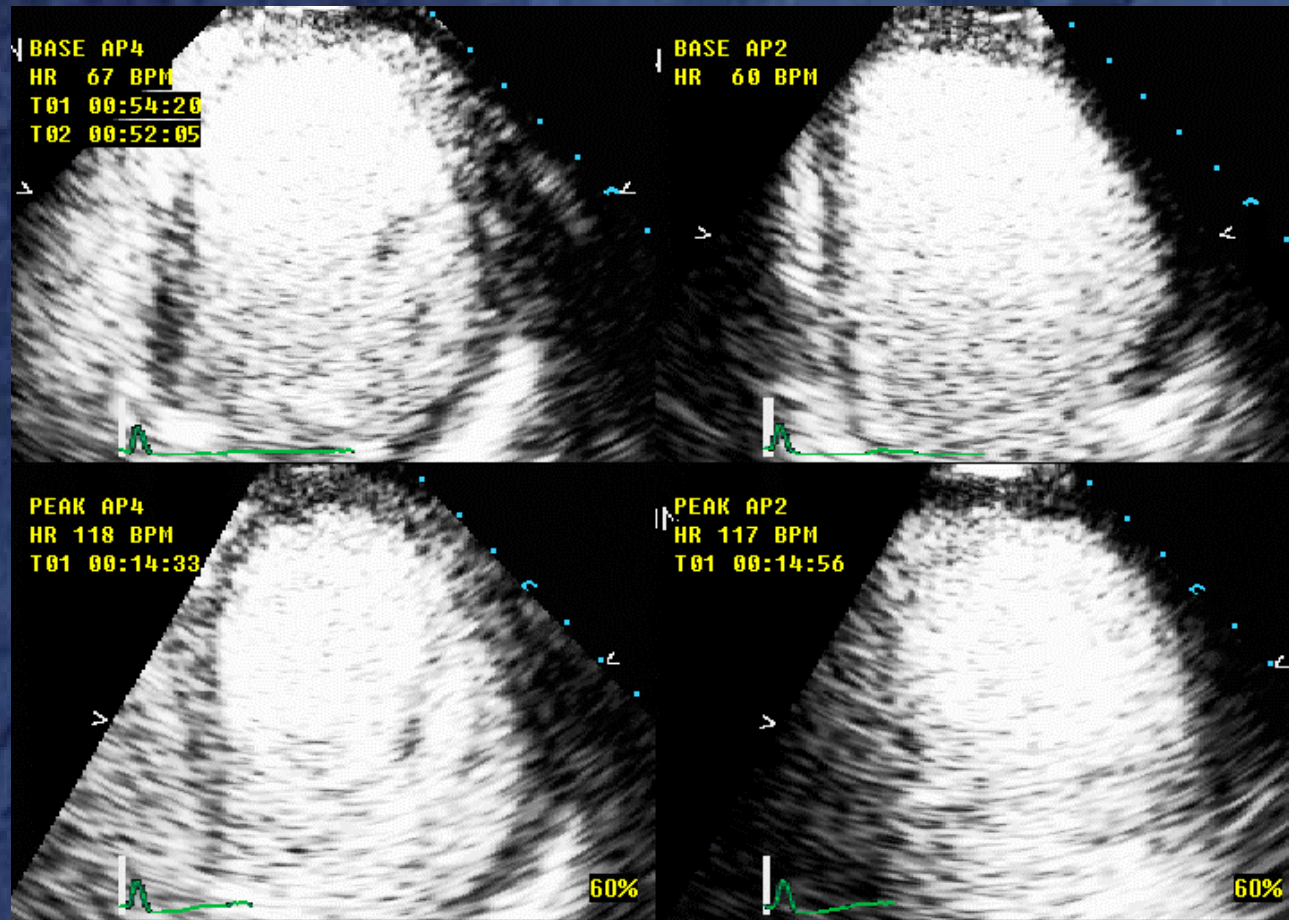
More Objective Stress *Color Kinesis with contrast*





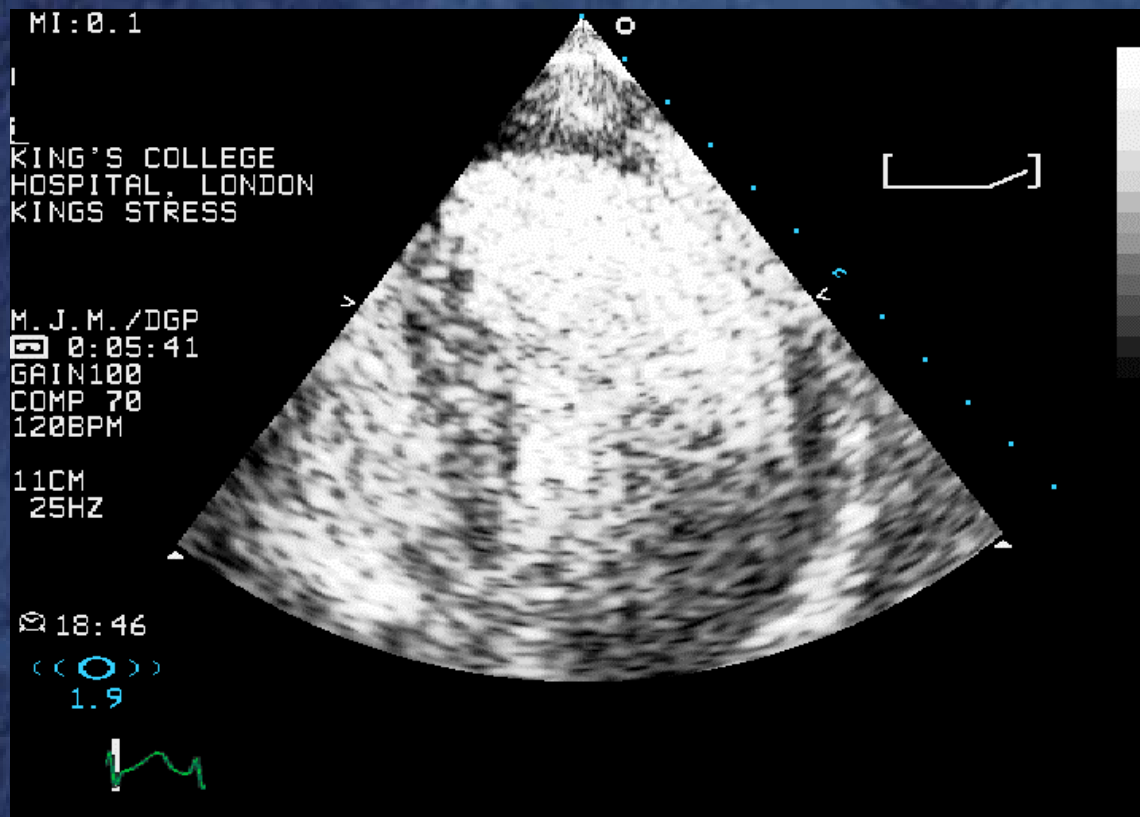
MOVIE

Contrast Echo Helps Stress *Wall motion and perfusion*

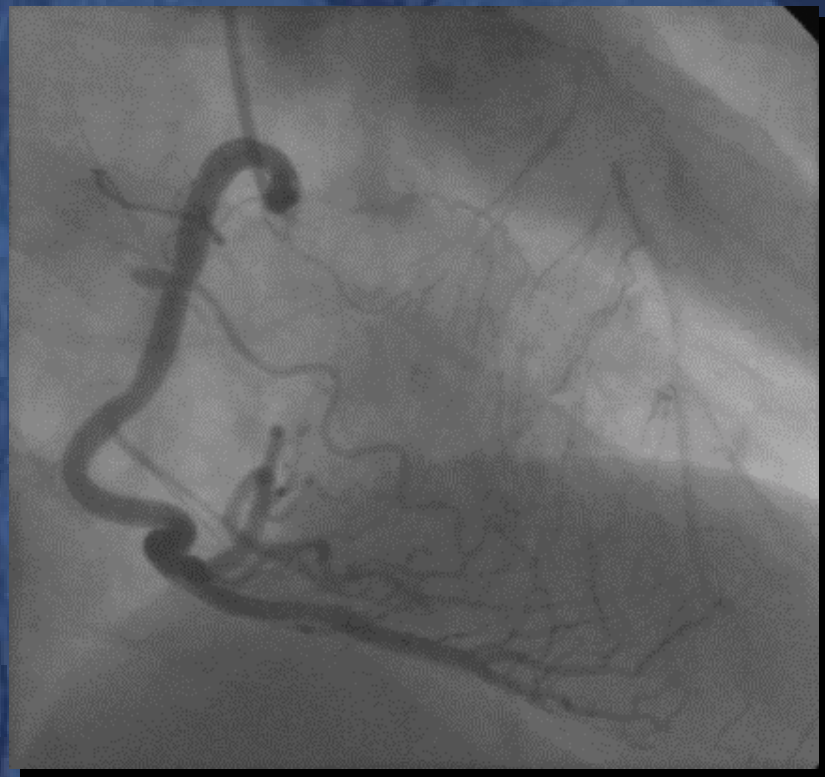
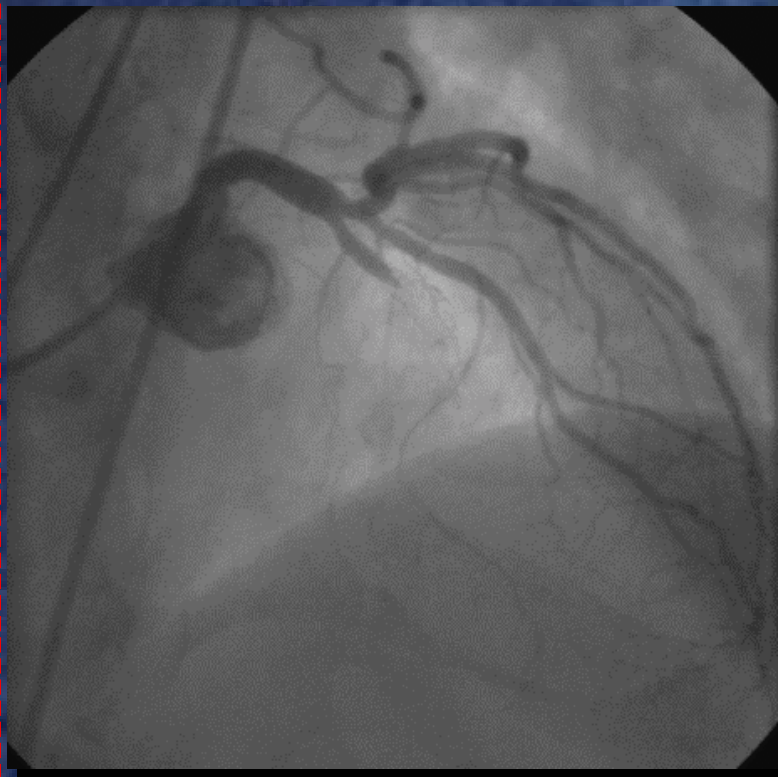


MOVIE

Recurrence of Symptoms *Post LAD Stent*



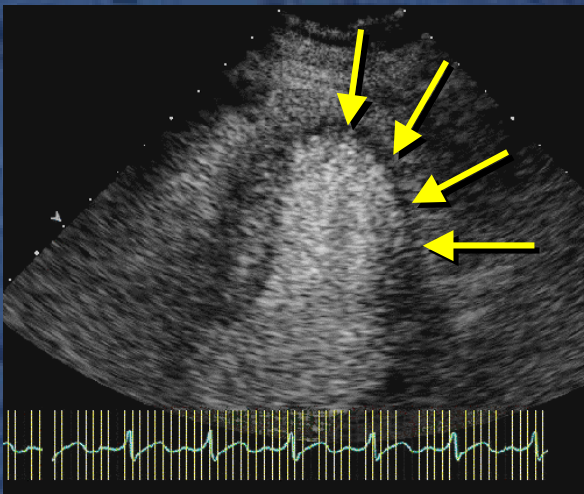
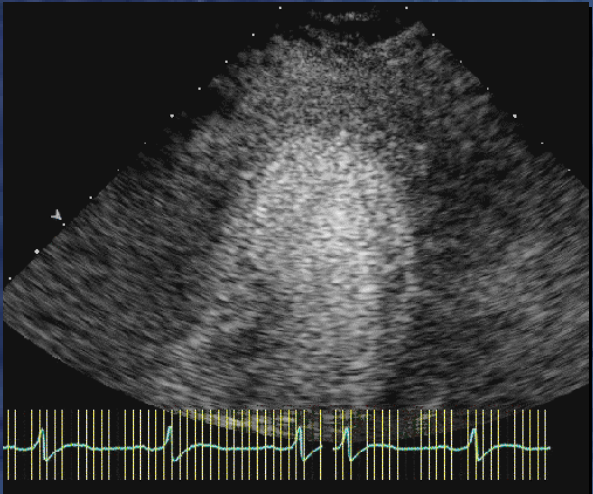
Occluded LAD Stent



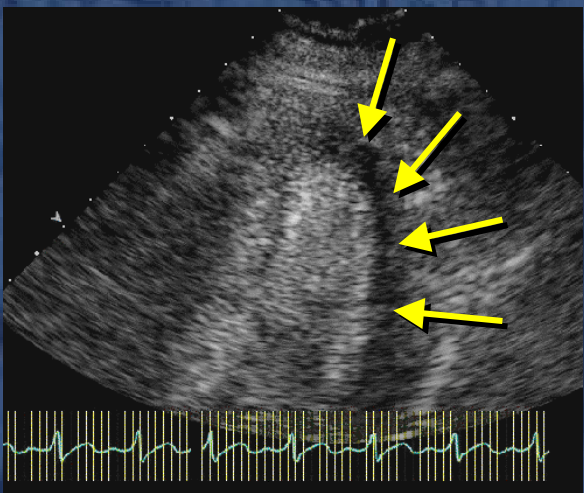
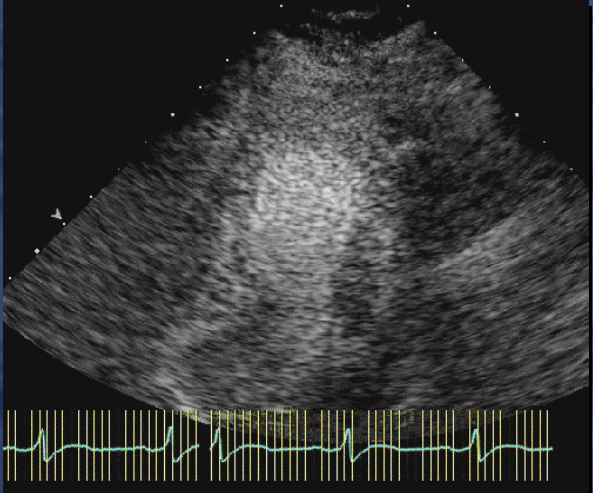
Diastole

Rest

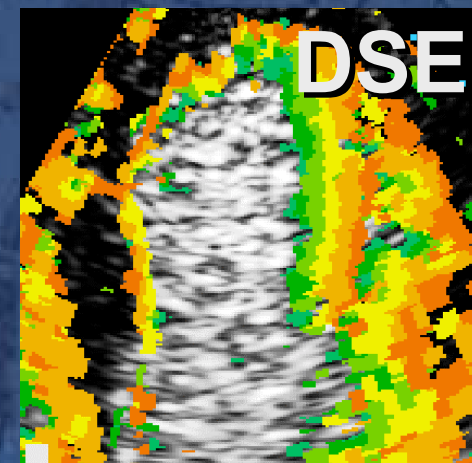
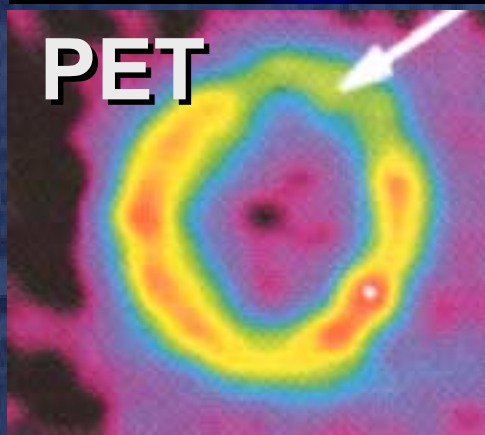
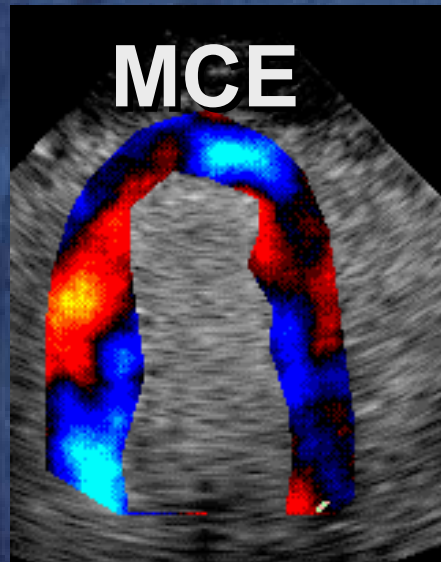
Stress



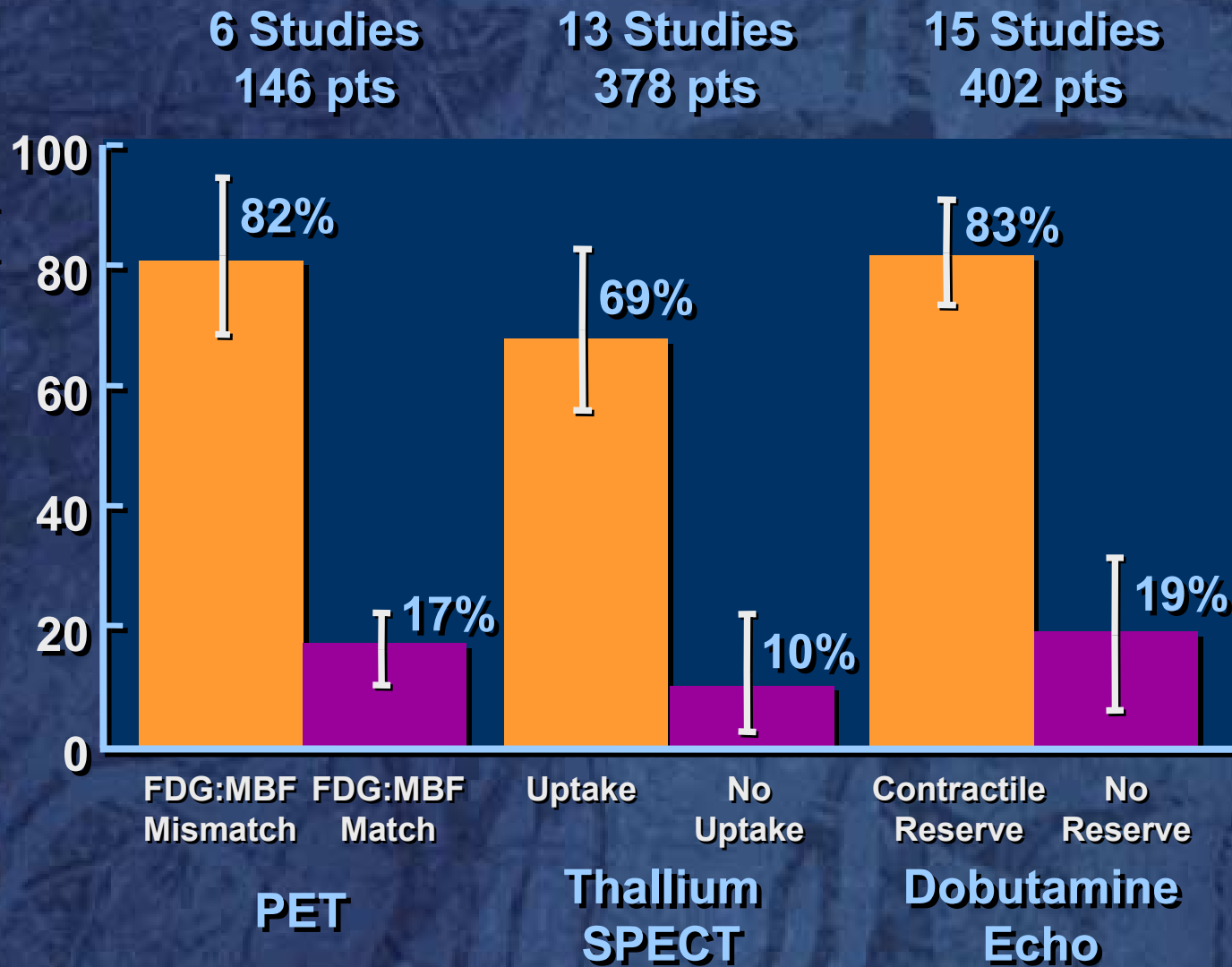
Systole



Viability Tests – The Competition?



Improvement in Regional LV Function
After CABG/PTCA (%)



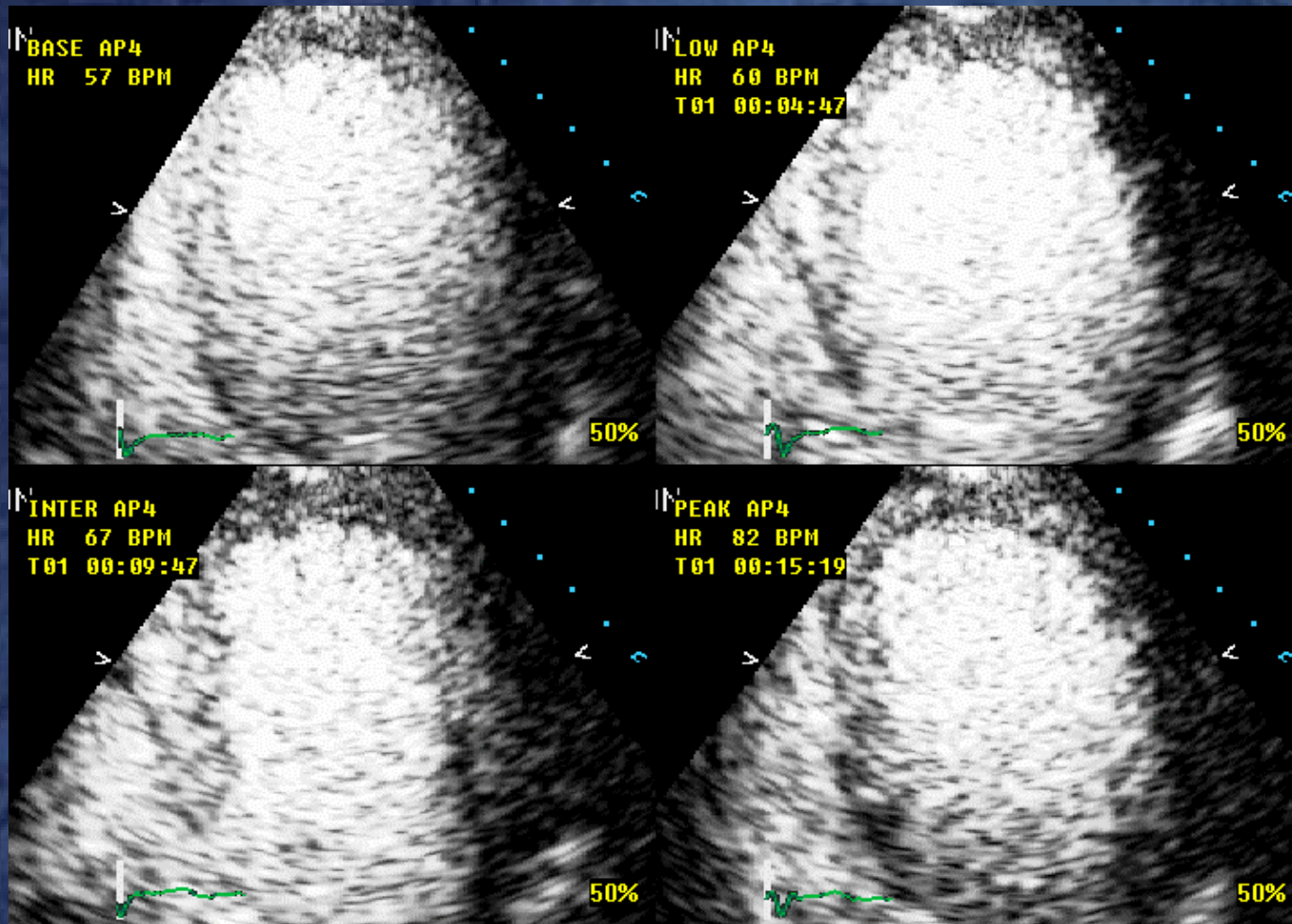
Assessment of Viability

Myocardial contrast (MCE)

- **DSE demonstrates contractile reserve**
- **Contrast shows microvascular integrity**
implies viability
- **May complement DSE**
functional recovery post revasc
LV remodeling

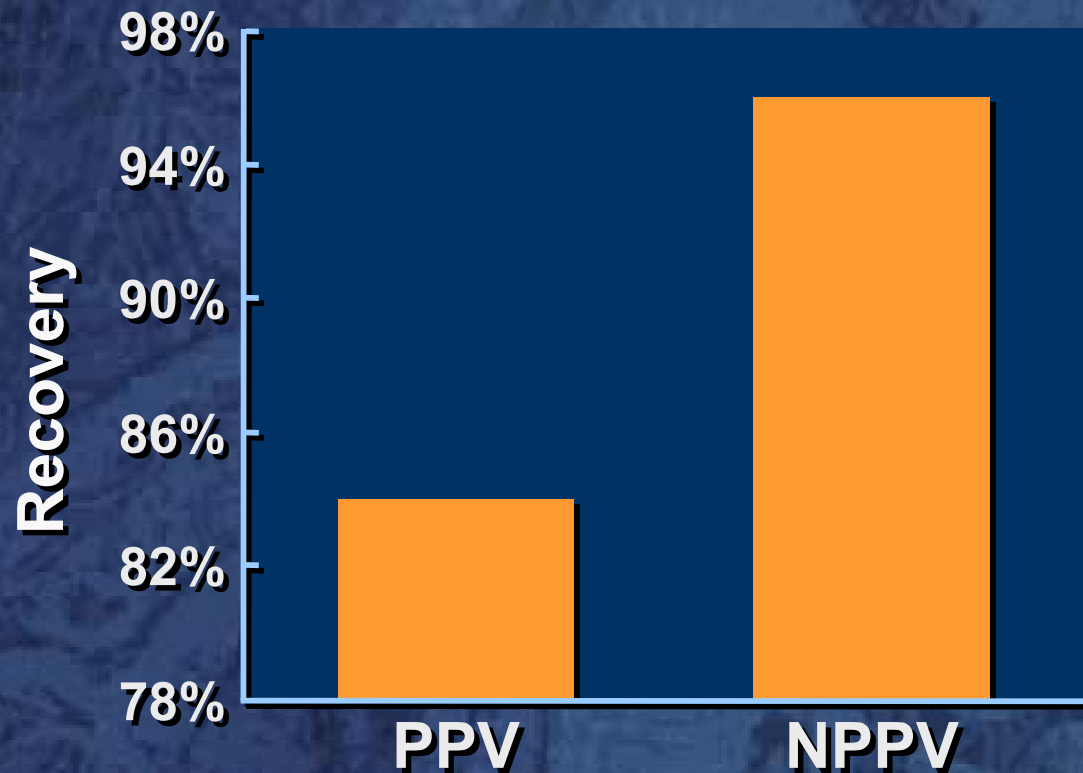
MOVIE

Contrast Stress Viability Study



MCE Prediction of Recovery

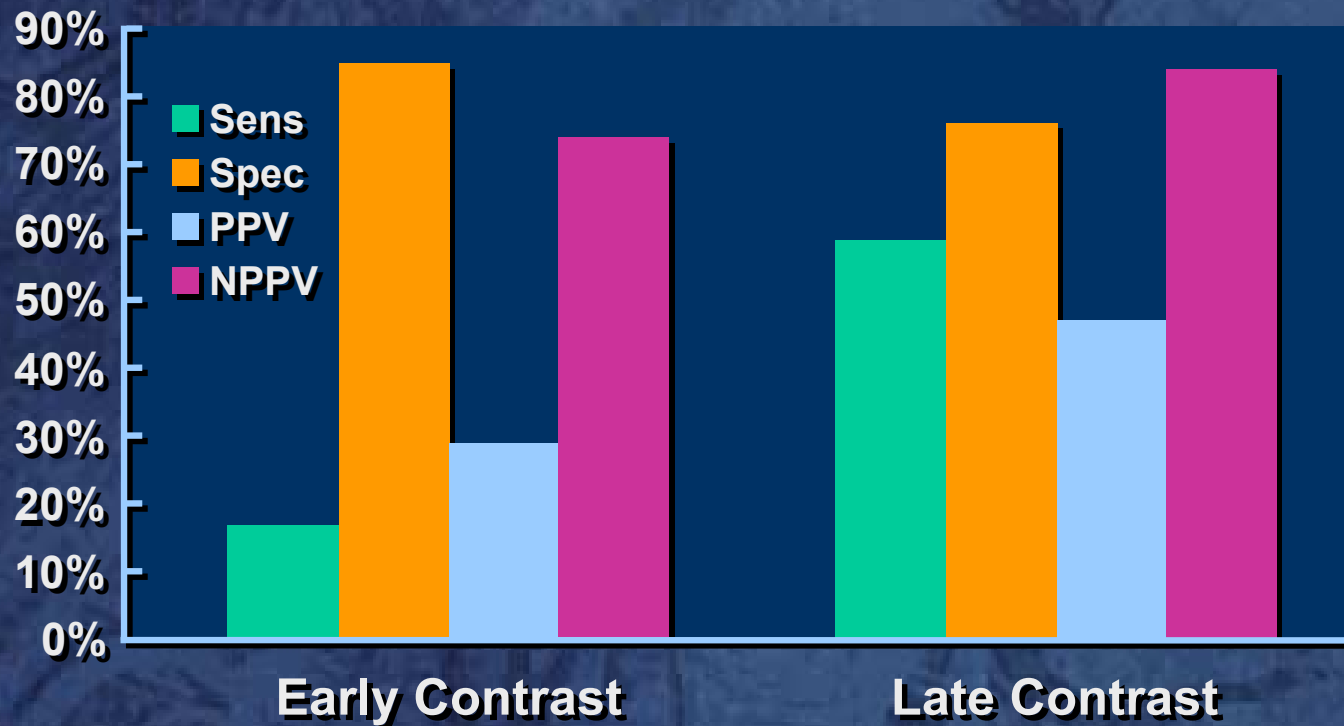
Dysynergic Myocardium following PTCA



26 pts post MI
Wall motion 4 weeks post PTCA

Balcells et al Circulation 2001

MCE Prediction of Recovery *Dysynergic Myocardium after AMI*

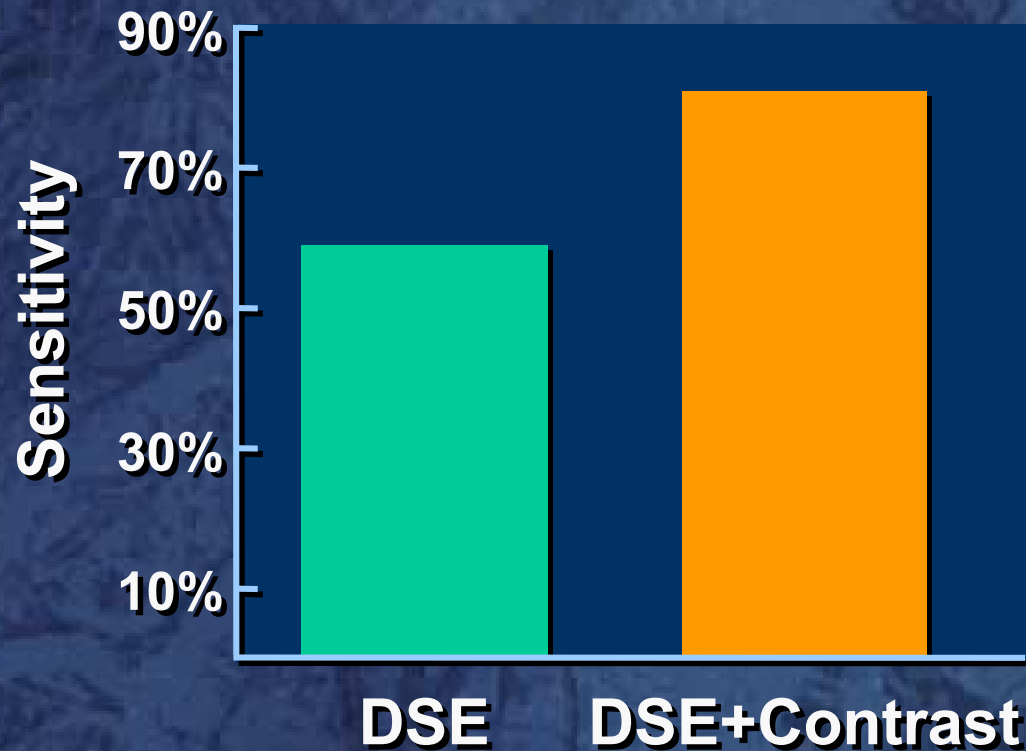


96 pts post MI

Wall motion 3mos & 6mos post revasc

Swinburn et al JACC 2001

DSE & MCE Prediction of Recovery *Dysynergic myocardium after AMI*



98 pts post MI

Wall motion analysis at 6 mos

Senior et al Circulation 2001

Contrast & Viability Update

- **Contrast & LV function**
Global, regional, thrombus
- **Stress echo - reversible ischemia**
Endocardial def, Color Kinesis, perfusion
- **Assessment of viability**
DSE – contractile reserve
MCE – microvascular integrity
functional recovery, remodeling