

Early Repolarization

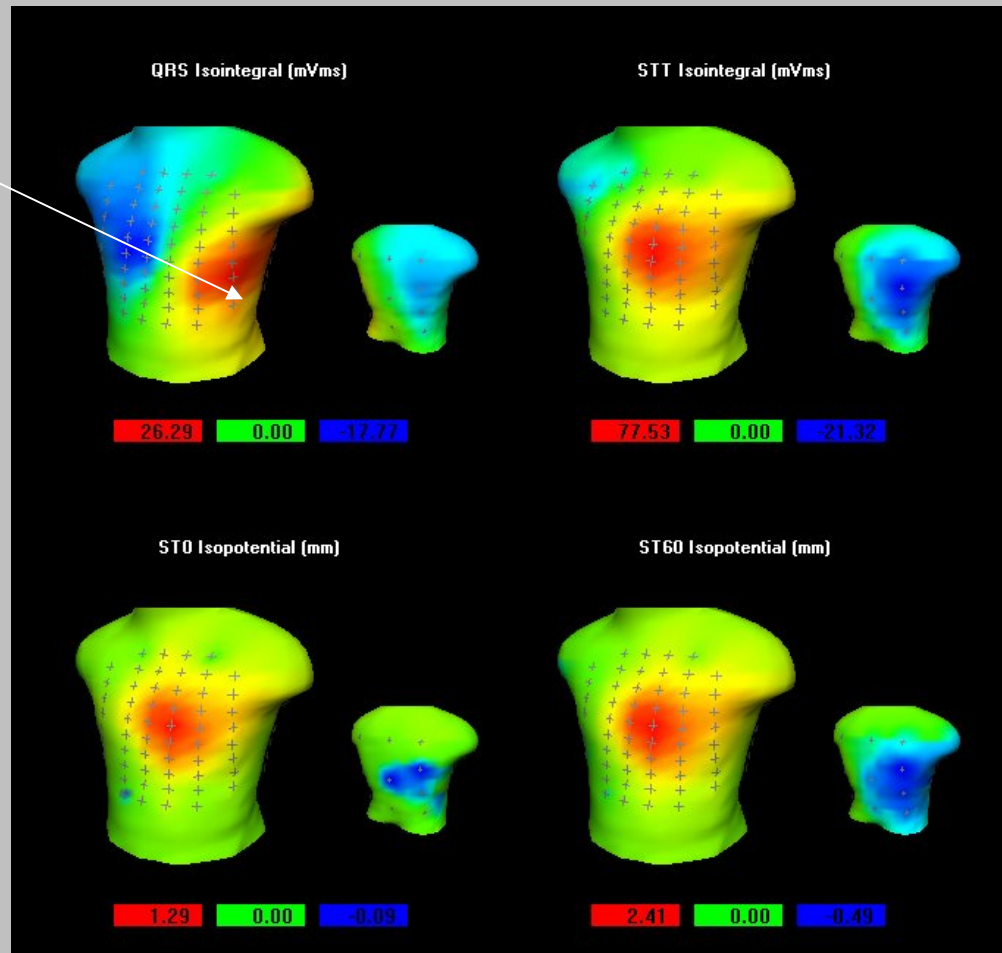
(See Demos-2-1 & 2-2)

Early Repolarization

- In the continuum of ST elevation between Normal and Anterior MI
- Conduction may exceed bounds
 - Normal QRS within +/- 50 (approx)
 - STT can exceed +90/-40 (big T waves)
- ST0 (J point)
 - May have small exceedance in anterior region
 - Use concave T wave and lack of hyperacute T wave as discriminator from small anterior MI

Demo case 2-1

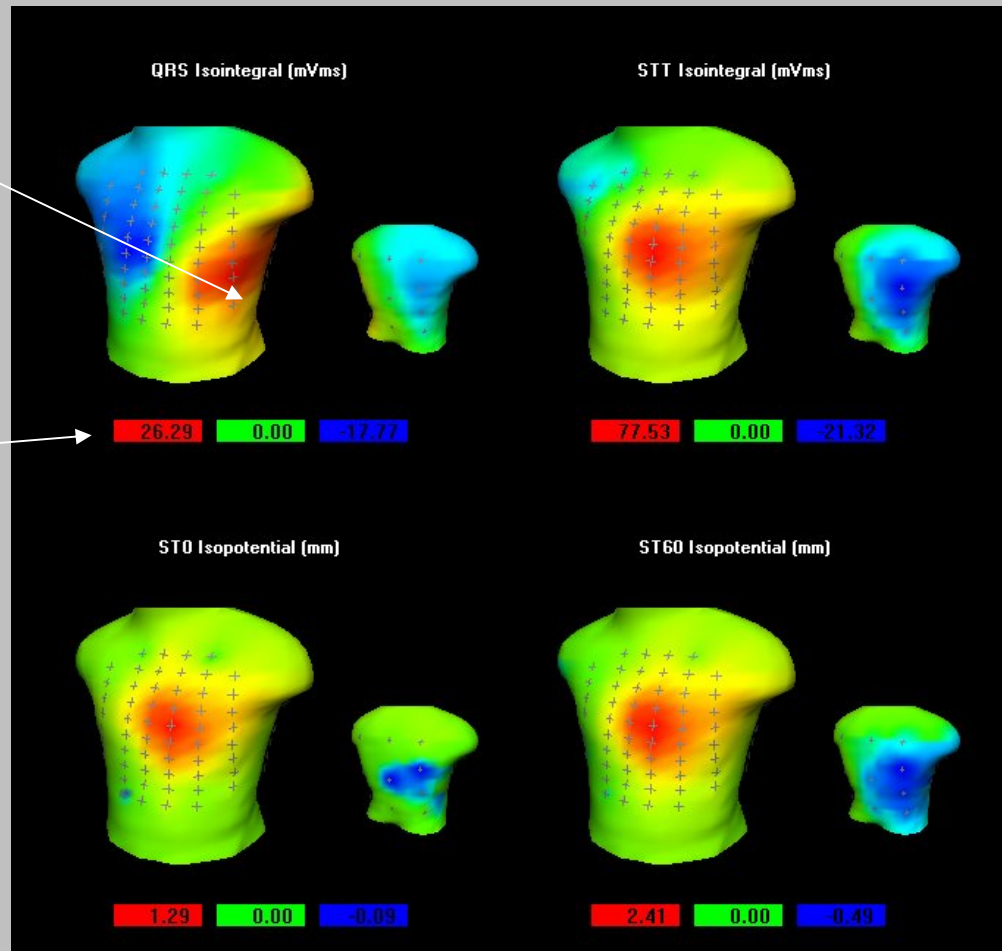
Axis OK



Demo case 2-1

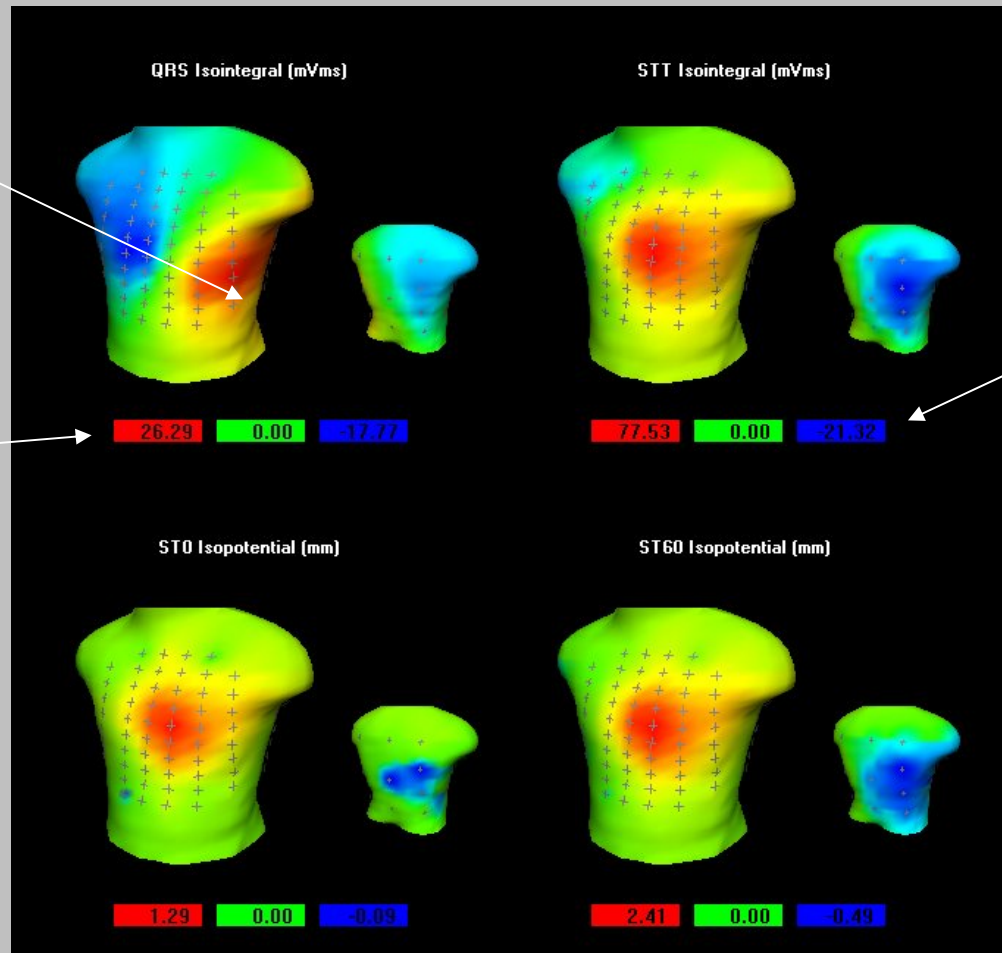
Axis OK

QRS at +26,
-17 is well
within normal
+/- 50



Demo case 2-1

Axis OK
QRS at +26,
-17 is well
within normal
+/- 50



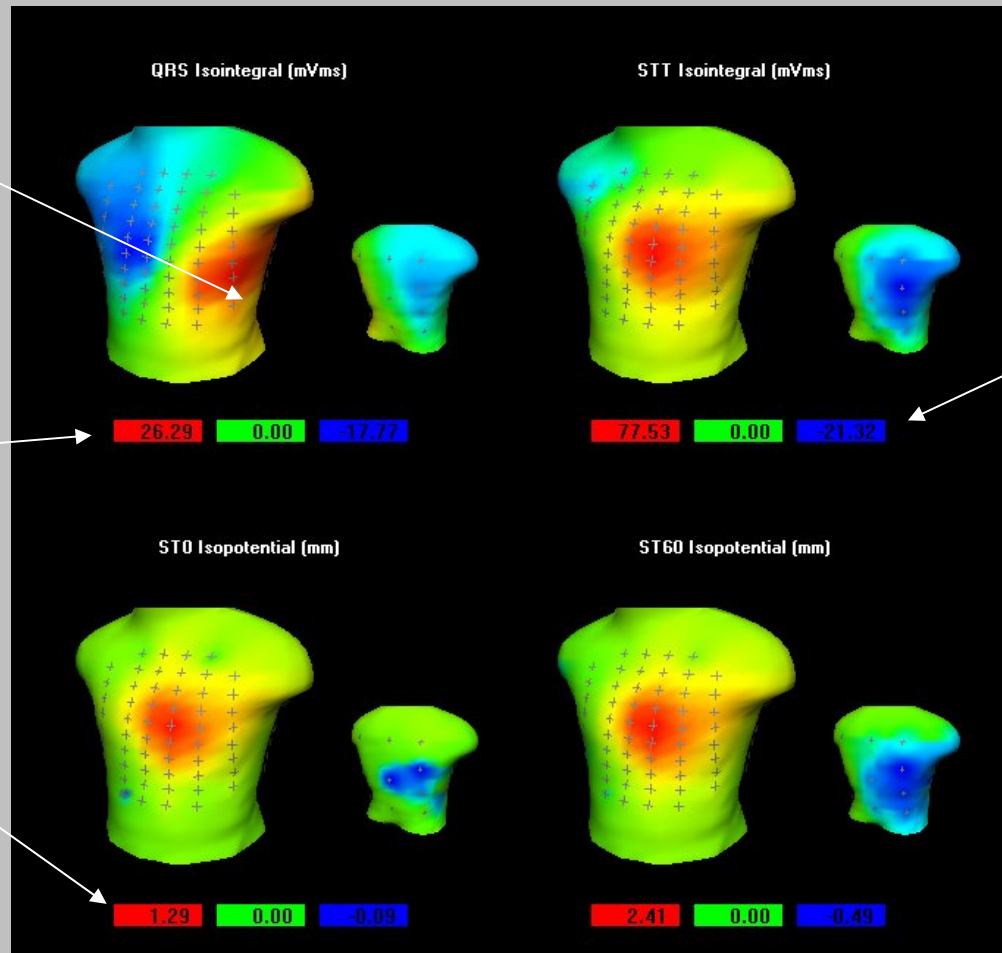
STT at +77, -21
is well within
normal +90, -40

Demo case 2-1

Axis OK

QRS at +26,
-17 is well
within normal
+/- 50

Max ST at
1.2mm
within
normal
bounds for
Anterior



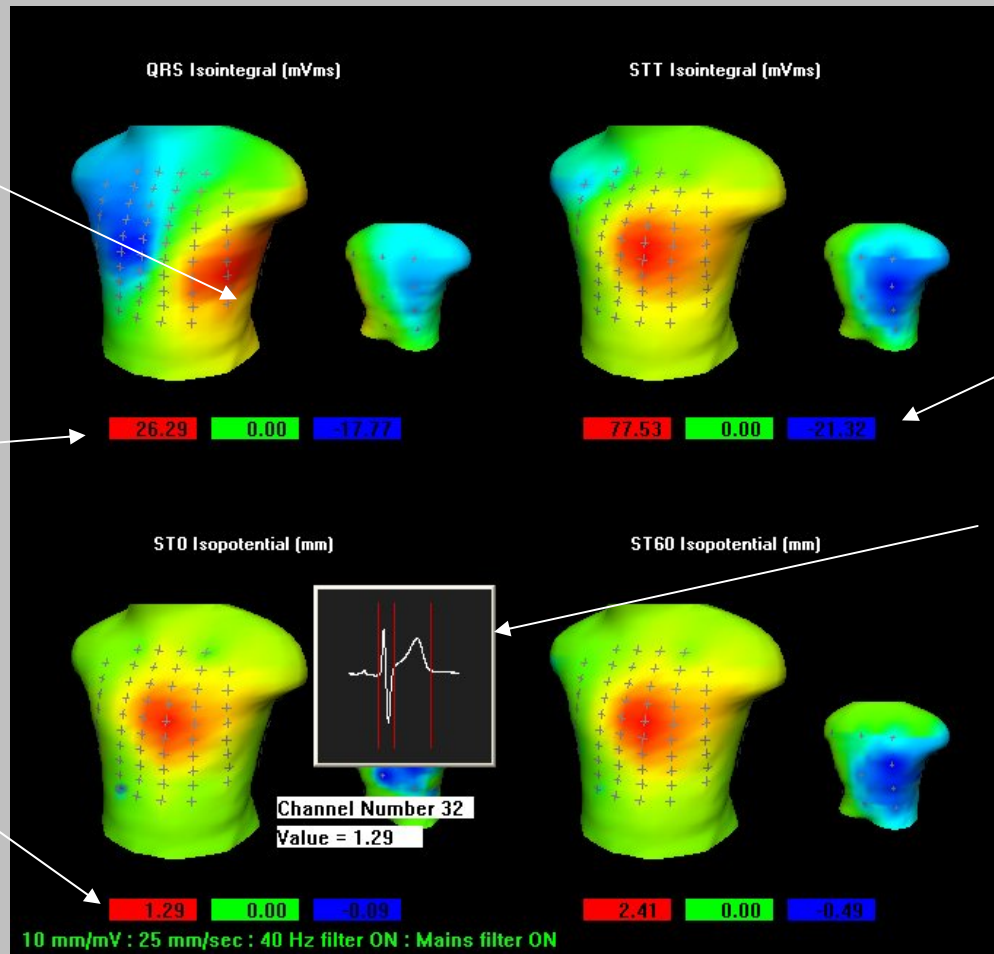
STT at +77, -21
is well within
normal +90, -40

Demo case 2-1

Axis OK

QRS at +26, -17 is well within normal +/- 50

Max ST at 1.2mm within normal bounds for Anterior



STT at +77, -21 is well within normal +90, -40

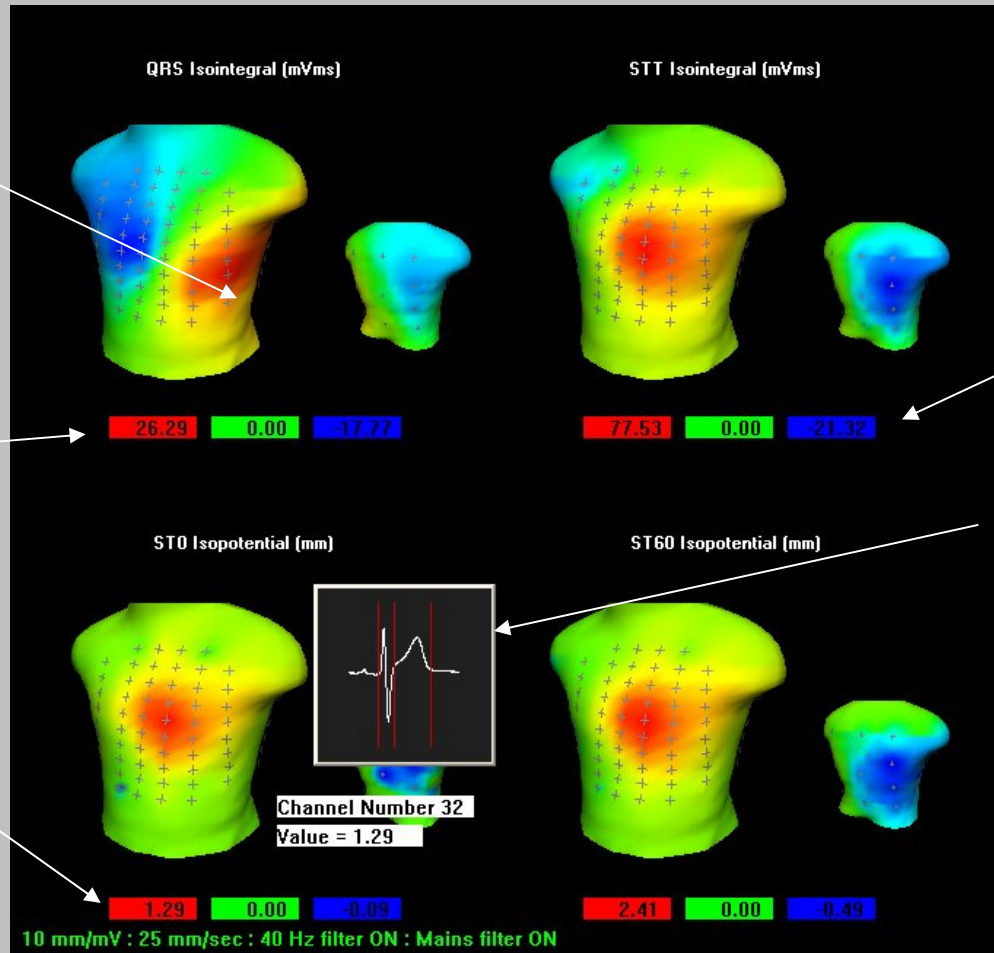
Concave Elevation

Demo case 2-1

Axis OK

QRS at +26, -17 is well within normal +/- 50

Max ST at 1.2mm within normal bounds for Anterior



STT at +77, -21 is well within normal +90, -40

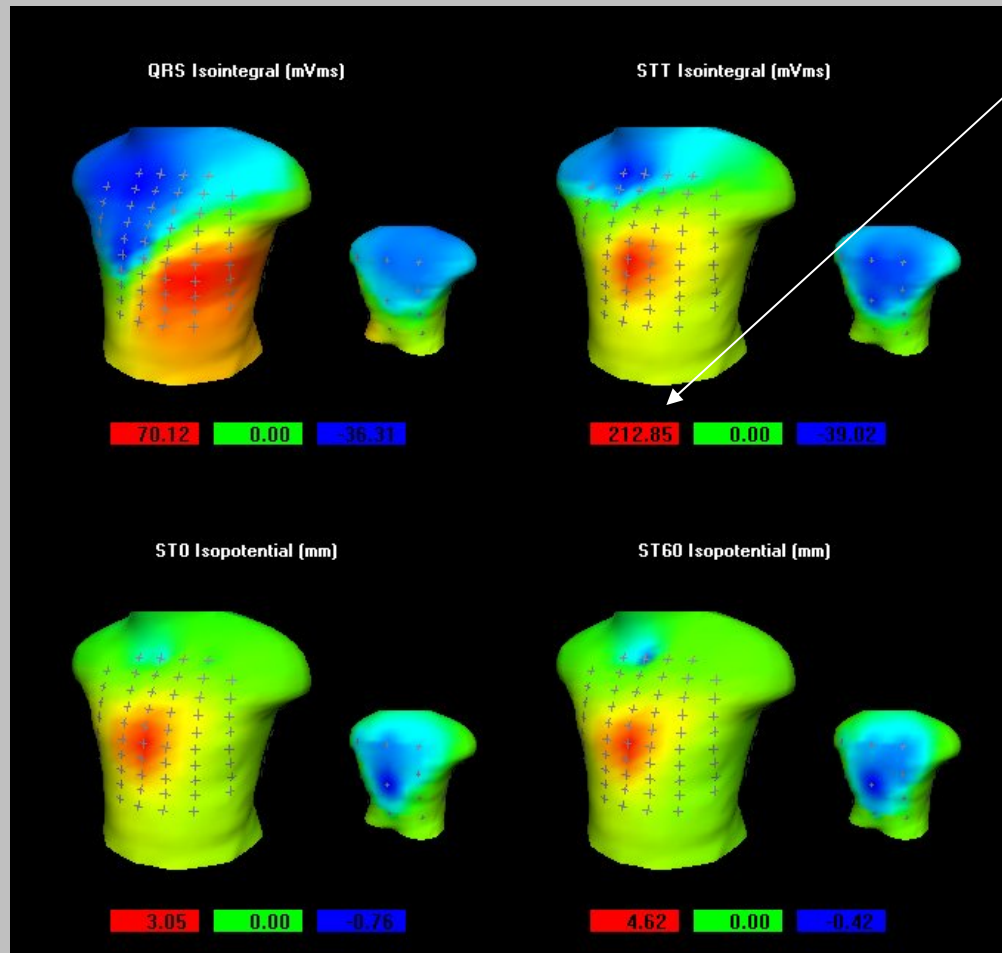
Concave Elevation

Conclusion:
NORMAL, but Early Repolarisation

Now Look at demo 2-2

This is a more “aggressive” Early Repol, have to differentiate it from MI

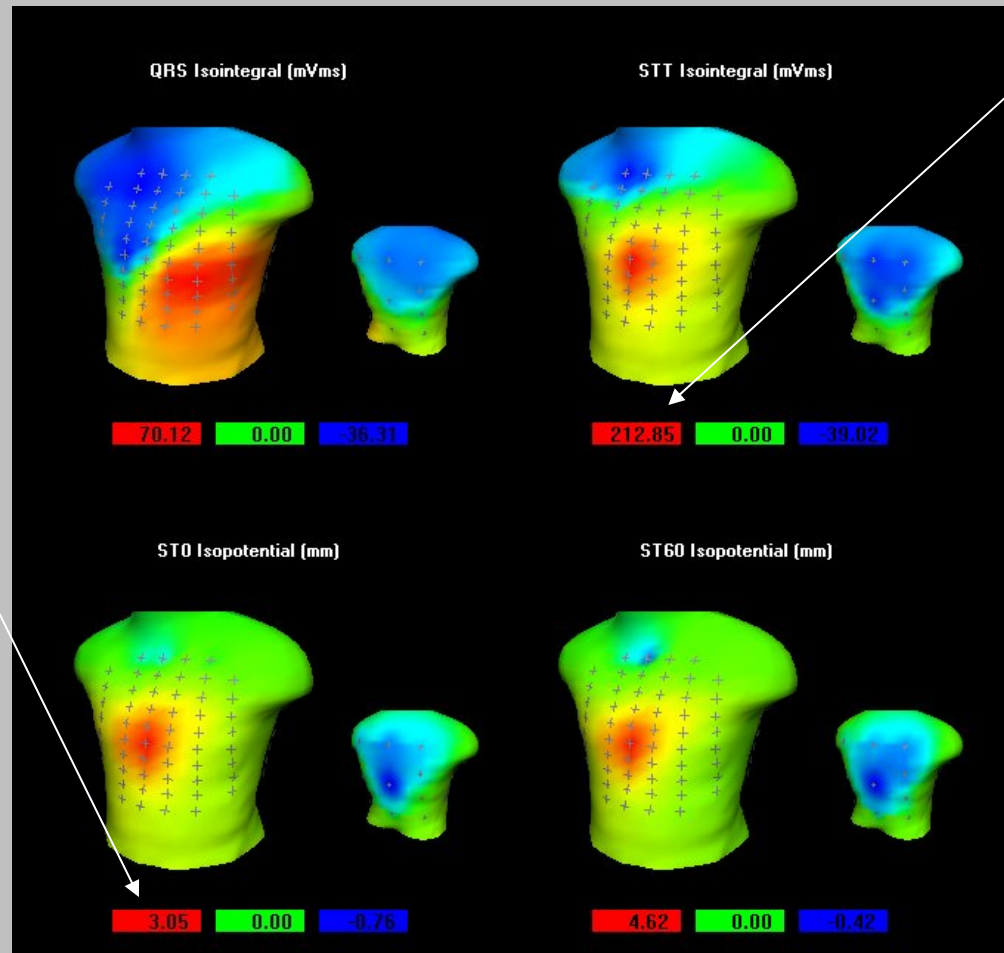
Demo case 2-2



STT Area at 212 is massively above normal of +90 (due to large T wave)

Demo case 2-2

ST elevation
at 3.05mm is
suggestive
of MI

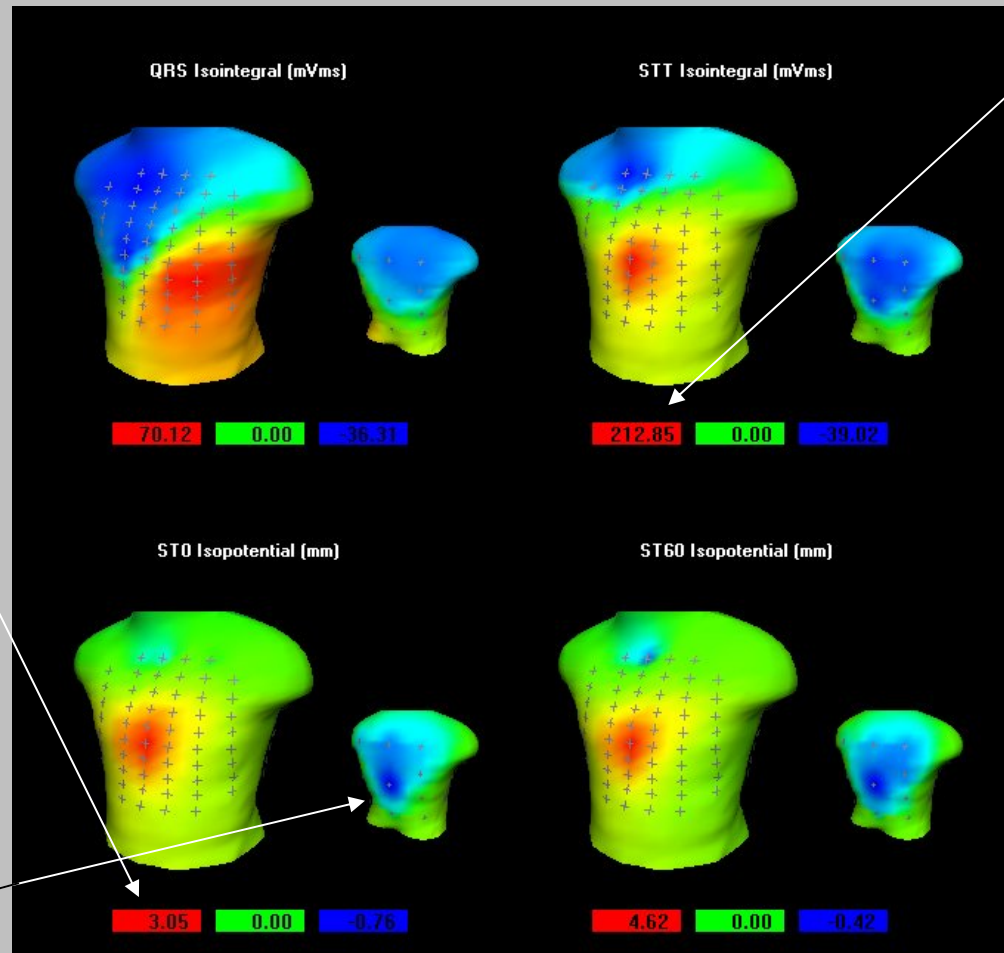


STT Area at 212
is massively
above normal of
+90
(due to large T
wave)

Demo case 2-2

ST elevation at 3.05mm is suggestive of MI

There is even some reciprocal depression (0.76mm in posterior)

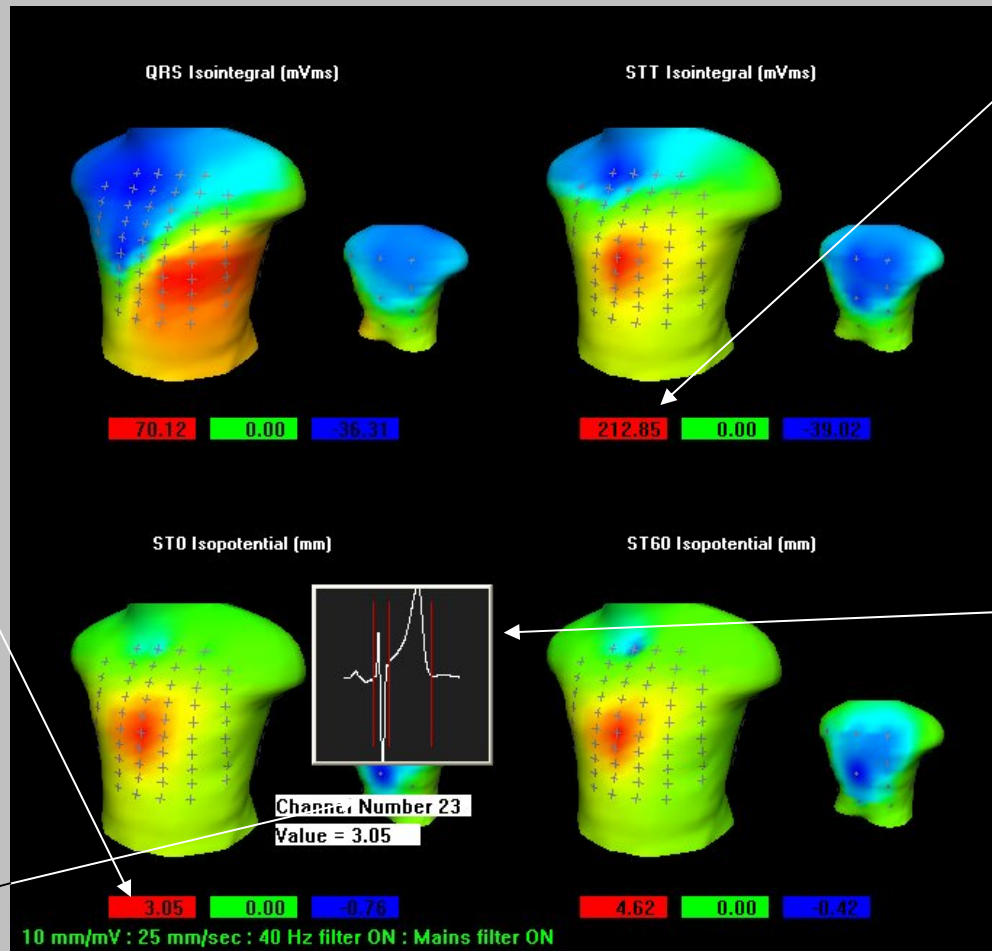


STT Area at 212 is massively above normal of +90 (due to large T wave)

Demo case 2-2

ST elevation at 3.05mm is suggestive of MI

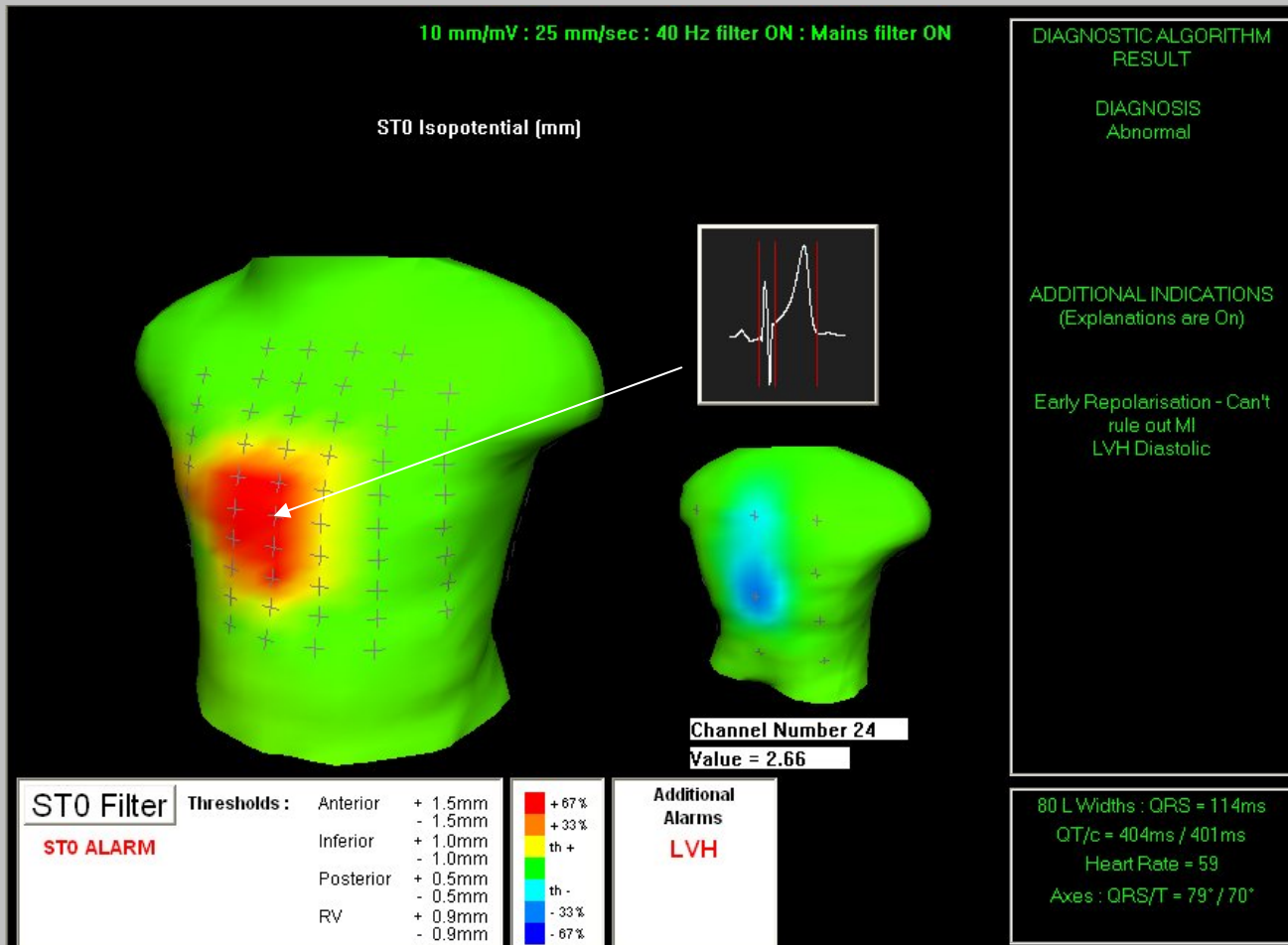
There is even some reciprocal depression (0.76mm in posterior)



STT Area at 212 is massively above normal of +90 (due to large T wave)

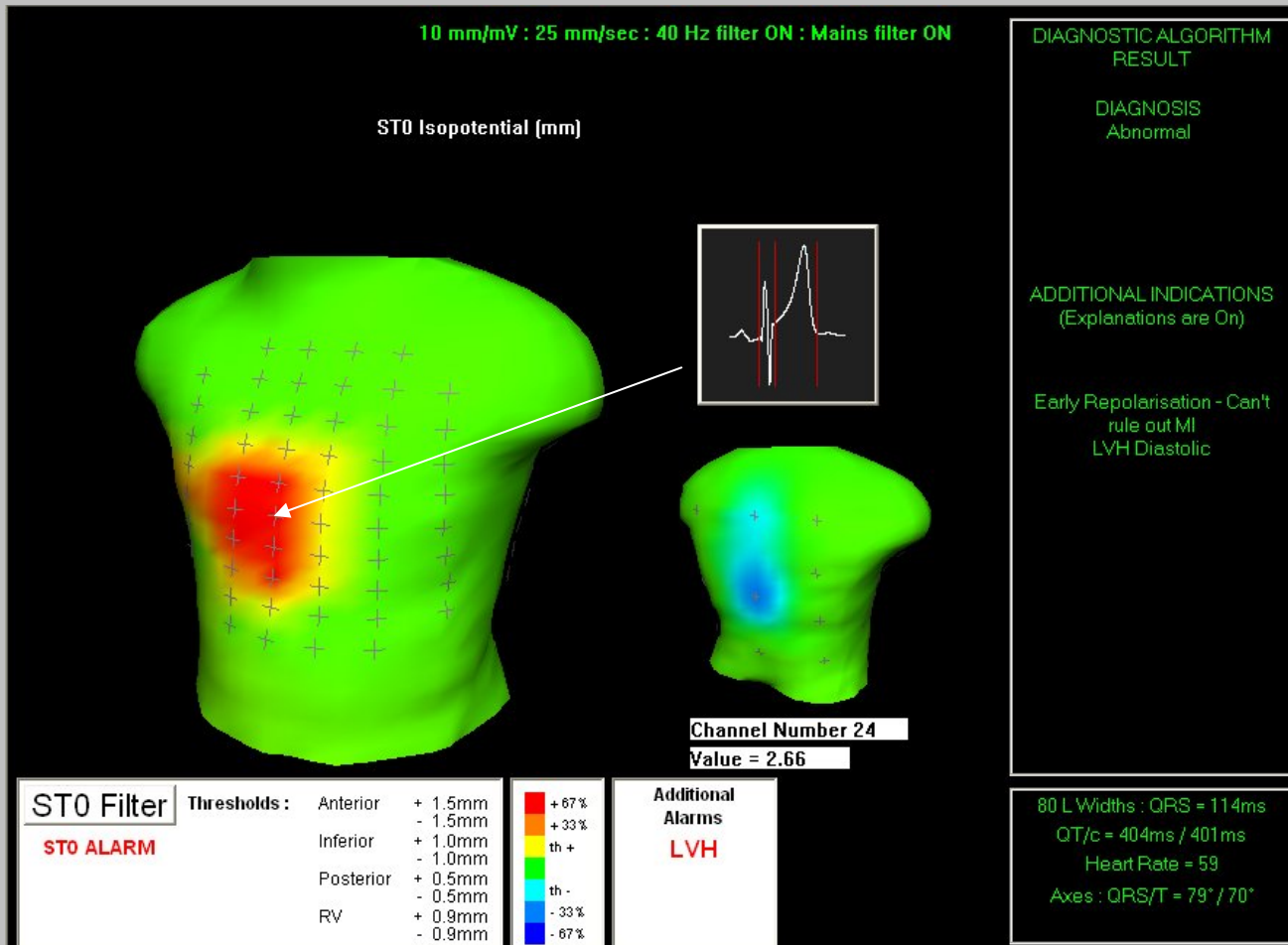
ECG pop up reveals the concave elevation

Not a “Jolly Green Giant” this time



Algorithm has called Early Repol, but cannot rule out MI as ST elevation is significant

Not a “Jolly Green Giant” this time



Algorithm has called Early Repol, but cannot rule out MI as ST elevation is significant

Algorithm Explanation:
Concave elevation with no abnormal Q waves, hyperacute T waves or loss of R wave progression

The End